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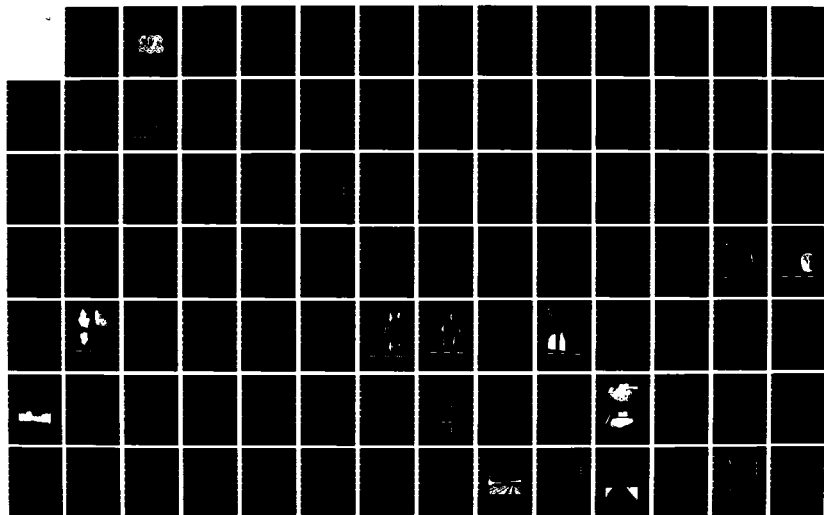
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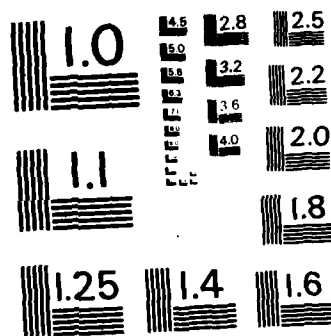
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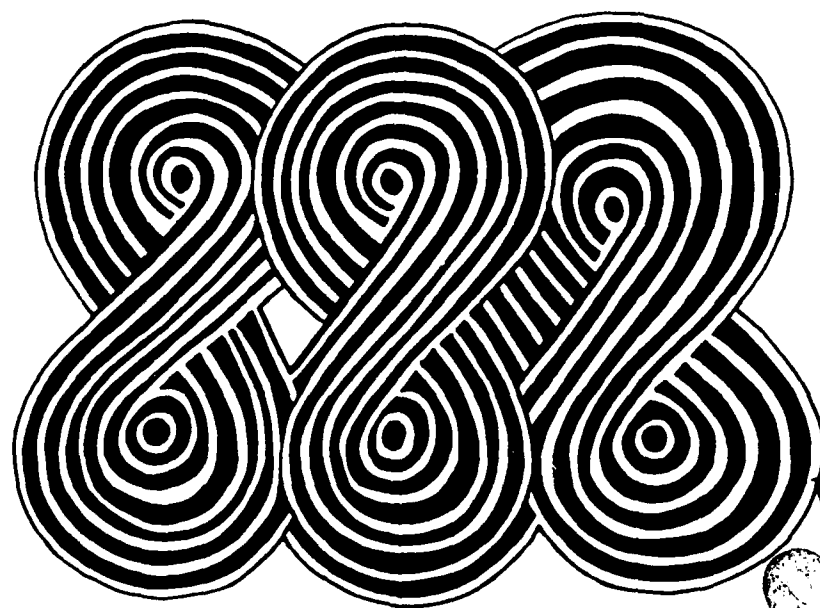


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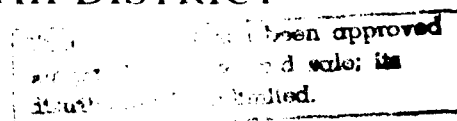
THE BEAVERDAM GROUP ①

ARCHAEOLOGICAL INVESTIGATIONS AT
9EB92, 9EB207, 9EB208 AND 9EB219
RICHARD B. RUSSELL MULTIPLE
RESOURCE AREA
ELBERT COUNTY, GEORGIA

EDITED BY L. JANICE CAMPBELL AND
CAROL S. WEED



FUNDED BY: U.S. ARMY CORPS OF ENGINEERS,
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1984

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Edited By

L. JANICE CAMPBELL
CAROL S. WEED

Contributors:
Phillip A. Bandy
Susan Fulgham
John P. Lenzer
Mark T. Swanson
Prentice M. Thomas, Jr.

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ABSTRACT

In August through October of 1980, New World Research, Inc., conducted intensive testing and data recovery investigations at four sites (9EB92, 9EB207, 9EB208, 9EB219) known collectively as the Beaverdam Group. Previous research at three of the sites had indicated the presence of a possible Stallings occupation at 9EB219, and Mississippian occupations at 9EB92, 9EB207, and 9EB219. Only survey level work had been conducted at 9EB208, but Taylor and Smith (1978) had indicated that the site might be a possible quarry location. The NWR investigations confirmed the presence of Savannah River Formative occupation at 9EB219 in addition to Late Woodland and Mississippian occupations. Limited late Mississippian materials were recovered from 9EB92 and 9EB207, however the focus of occupations at both sites appears to be during the Savannah II period. At 9EB208 the possibility of the site use as a quarry location could not be confirmed due to its disturbed condition; however, Archaic and early Mississippian use of the site location was substantiated.

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The Beaverdam Group Project
Personnel

Susan Fulgham - Field
Director
Mark T. Swanson - Survey
Director
Martha C. Rucker -
Photographer
Charles Cisco - Crew Chief
Joe Joseph - Assistant
Crew Chief, 9EB92 and
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CHAPTER ONE

INTRODUCTION

In June, 1980, New World Research, Inc. (NWR) was awarded the contract for testing and Phase I data recovery at three sites in the Richard B. Russell Multiple Resource Area (RBRMRA). The contract was administered for the U.S. Army Corps of Engineers, Savannah District by Interagency Archeological Services (IAS) in Atlanta. Although the RBRMRA occupies portions of both Georgia and South Carolina, all of the work undertaken by NWR was on the Georgia side, within Elbert County.

Fieldwork at three sites, 9EB92, 9EB207, and 9EB219, was initiated in August, 1980. In September, 1980, the contract was amended to include 9EB208, a site west of 9EB207 that was being impacted by soil removal. Because of the proximity of these four sites to one another and, collectively, to Beaverdam Creek, the sites included in this project are designated the Beaverdam Group.

In addition to actual field operations, a background literature and records search was conducted to gather data principally on two areas of interest: 1) the status of archaeological knowledge; and 2) the history of land-use and land alteration in the project area. This search was begun prior to the field work, but continued while in the field and during final laboratory analysis and report preparation.

General Project Information

The Richard B. Russell (RBR) project area is situated in the upper Piedmont physiographic region of Georgia and South Carolina (Figure 1).

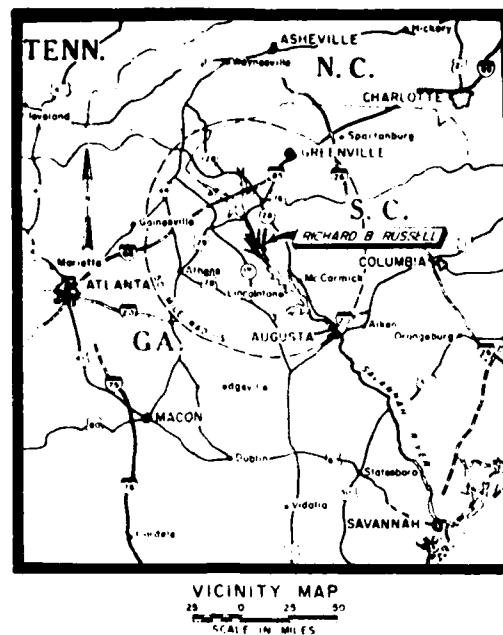


FIGURE 1. LOCATION OF THE RICHARD B. RUSSELL DAM AND LAKE PROJECT ON SAVANNAH RIVER IN GEORGIA AND SOUTH CAROLINA (From U.S. Army Corps of Engineers, Savannah District, Map of Richard B. Russell Project).

Although our work concentrated specifically on sites in Elbert County, Georgia, the Russell project encompasses portions of Elbert and Hart counties in Georgia and Abbeville and Anderson counties in South Carolina (Figure 2). The comprehensive multiple resource development of the project area is directed toward utilization of the Savannah River for increased hydroelectric power, flood control, public recreation, and fish and wildlife management.

Proposed construction will include a dam and spillway, reservoir, operation and administrative facilities, access to the reservoir, highway and railroad relocations, and recreation areas (Taylor and Smith 1978:1). This work will clearly affect land-use as well as threaten the integrity of prehistoric and historic cultural resources located within the impact area.

The archaeological investigations carried out by NWR at the Beaverdam Group (Figure 3) are part of an overall plan of cultural resource management in the RBR project area that has been ongoing over the last several years. During the 1980 field season, more than a dozen firms and academic institutions were actively involved in archaeological inquiry in the RBRMRA. While not the final phase of

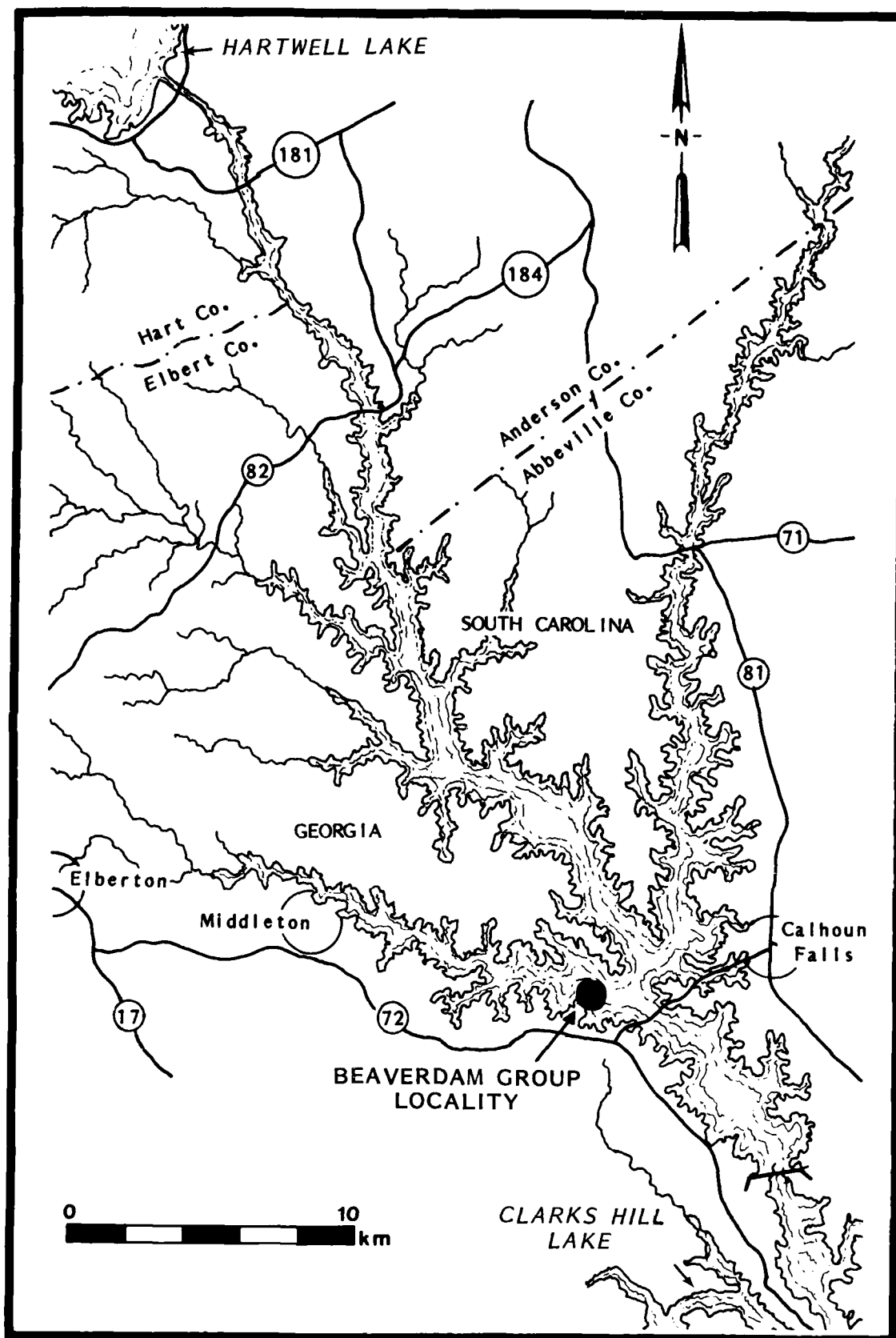


FIGURE 2. LOCATION OF THE BEAVERDAM GROUP WITHIN THE RICHARD B. RUSSELL MULTIPLE RESOURCE AREA (from Taylor and Smith 1978:2).

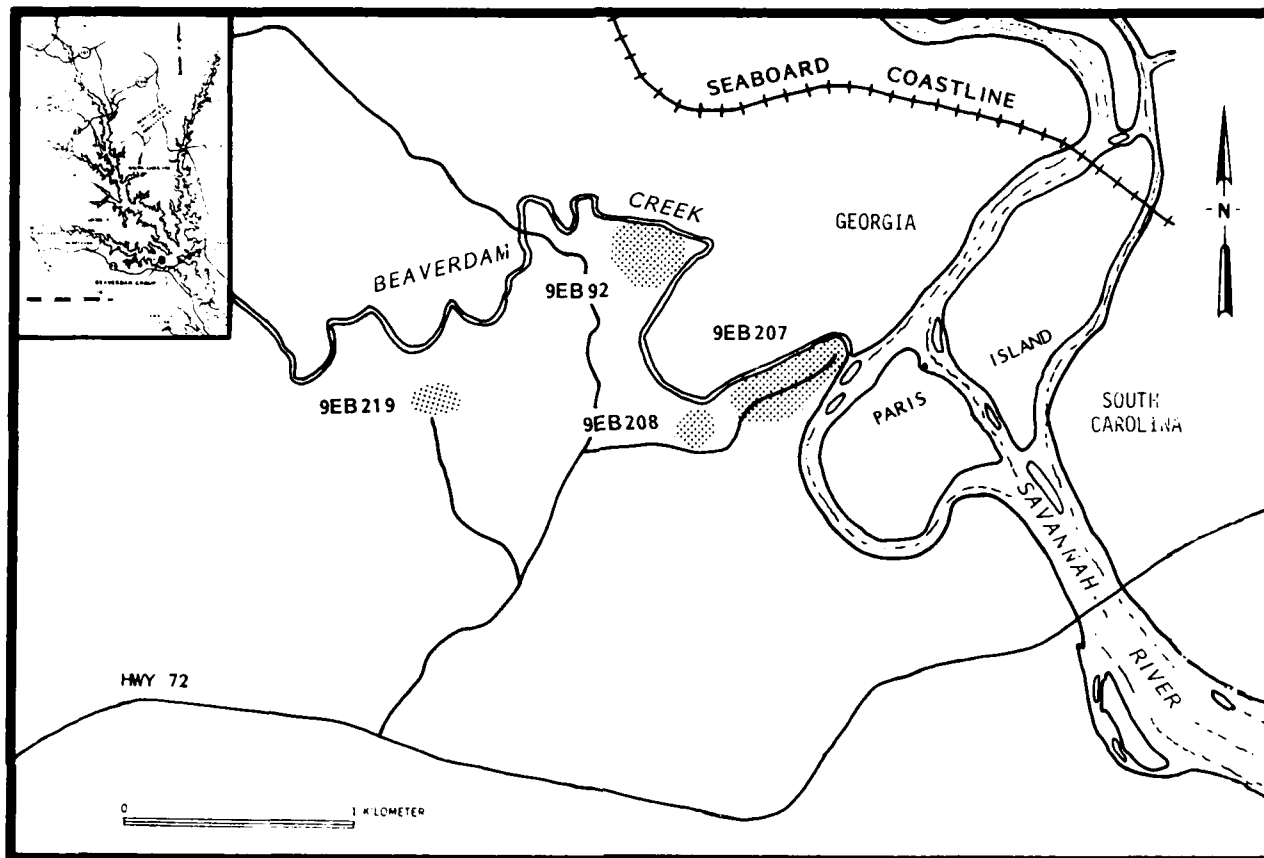


FIGURE 3. INDIVIDUAL SITE LOCATIONS IN RELATIONSHIP TO THE SAVANNAH RIVER AND BEAVERDAM CREEK.

work to be conducted, the projects undertaken in the 1980 field season represented the most intensive work to date on a site-by-site basis. In order best to describe the objectives and results of our work at the Beaverdam Group, a brief review of the cultural resource management project as a whole is presented below.

Brief Review of Previous Investigations

The earliest archaeological inquiry relating to the subsequent formalization of the RBRMRA cultural resource mitigation plan was that

undertaken by Brooks Hutto (1970). Hutto's work focused on the Elbert County portion of what is now known as the Richard B. Russell Dam and Lake Project, but at that time was called the Trotters Shoals project. He conducted a brief reconnaissance with limited surface collections that resulted in the reporting of 38 sites, among them 9EB92. Hutto's work was not conducted in a systematic manner and the site information derived from his study provides only minimal data on chronology, site size, and site type.

In addition to Hutto's work, three surveys were undertaken by personnel with the Institute of Archeology and Anthropology at the University of South Carolina, Columbia, South Carolina. Similarly, these surveys focused on portions of the proposed reservoir area. The results of one survey were reported by the Institute (Hemmings 1970); however, the second and third survey results conducted by John Combes are referenced only in unpublished proposals and addendum to proposals submitted by the Institute to Federal contracting agencies, though Combes (1973) did summarize work conducted between Calhoun Falls and the Savannah River.

The only excavation to take place in the RBR project area prior to the late 1970s was that undertaken by the University of Georgia at the Beaverdam Creek Mound and Village (9EB85). Directed by Joseph R. Caldwell, the partial mound excavations were conducted in 1971 and reported later by Lee (1976). These excavations were expanded by the University of Georgia (under the direction of David Hally and James Rudolph) during the 1980 field season (Rudolph 1980).

The formalization of construction and development plans for the RBR project led, in 1977, to the inauguration of a much broader and more systematized inventory of cultural resources carried out by the Institute of Archeology and Anthropology, Columbia, South Carolina. Under contract with IAS, the Institute conducted a sample survey of the proposed RBR project area. The survey was oriented toward providing two measures of control: 1) control at the site level over measures of identification, recording, and evaluation; and 2) control at the overall survey level to ensure a statistically valid sampling procedure that would produce unbiased results.

While the sampling strategy, as presented in Taylor and Smith (1978:179-180), was basically a sound approach, several factors inhibited successful implementation of the procedure throughout the project area. Most significantly, the rugged terrain coupled with dense southeastern bottomland vegetation hindered access as well as surveyor mobility. Consequently, at some point during the project, the strategy was reviewed and modifications made to facilitate completion of the survey within the eight-week time period allotted by the contract.

It is unfortunate that the sampling strategy required mid-project changes since the result was an underrepresentation of bottomland localities where the problems of thick vegetation cover were the most severe. Despite non-representative coverage, the Institute survey

reported 490 previously known and newly identified sites. These sites have a combined total of 818 components. The site data, presented in the form of appendices, contain adequate information on site location, condition, size, depth, associated artifacts, and chronology.

In an effort to rectify the obvious bias resulting from the procedural changes described by Taylor and Smith (1978), IAS awarded a contract to Thunderbird Research Corporation (TRC) to conduct additional survey of the RBR bottomlands. In addition, a program of testing was undertaken by TRC at selected floodplain sites. The results of the survey are presented in a draft report by Gardner and Rappleye (1980); the results of TRC's testing program also are presented in draft form (Gardner and Barse 1980). While, at this stage, the draft lacks sections of substance dealing with background information, laboratory analysis, and interpretations, the site descriptions provide information on site setting, testing procedures, stratigraphy, artifact collections, chronology, and brief site interpretations.

As we inaugurated our testing and Phase I data recovery program at the Beaverdam Group, these previous studies represented the most recent work concentrated in the area encompassed by the RBRMRA boundaries. Although a common, and perhaps tired, complaint among archaeologists is that a lack of preceding work in an area has limited refinement of cultural sequences and reduced to inference interpretations of settlement, subsistence, and seasonality, the complaint is too frequently justifiable. The Georgia/South Carolina Piedmont in general may be one of those areas in which the complaint is valid. With the exception of the RBR project area, and perhaps several other CRM projects (e.g., Wallace Reservoir in Georgia; South Carolina Highway Surveys), the culture history of the Georgia/South Carolina Piedmont remains plagued by unresolved questions and issues.

This is not to infer that the area has been overlooked. Clearly, the work of Claflin (1931), Miller (1949), Caldwell (1954), Kelly and Neitzel (1961), Coe (1964), and Wauchope (1966) formed much of the basis for establishment of the cultural sequence and definition of the horizon markers. With the advent of cultural resource management, additional funding was available for archaeological study of areas threatened by various types of proposed construction or development (e.g., Hally 1970, 1979; House and Ballenger 1976). Still, it is safe to state that data from stratified excavations are not abundant in the Georgia/South Carolina Piedmont, and such data are necessary to address more sophisticated questions of prehistoric occupation.

This data base will dramatically increase when all of the reports on the current RBR work are available for public review. At that time, it is certain that some of the discussions presented in the following chapters will be subject to revision. However, available at present are some recent data from the presentations at the RBR sites conference held in December 1980 in Atlanta. Where appropriate, these data are referenced in this report.

In addition to the impact comparable RBR site data will have on our site discussions, the history of land-use and amateur collecting has also had a dramatic effect on site integrity and interpretations drawn from present investigations. To avoid misinterpretation, it is essential that sites be viewed in relation to the effects of land-use during the historic period.

Land-Use and Modification

The records search on land-use and ownership primarily centered upon the available information in the Elbert County Courthouse, Elberton, Georgia, and a check of the files of the Real Estate Division of the U. S. Army Corps of Engineers Office at Elberton, Georgia. The principal focus of the research was upon land-use data that would be helpful in determining the degree to which the Beaverdam Group sites had been exposed to natural or artificial impact.

To arrive at an understanding of the extent to which man and/or nature has affected the integrity of the sites, the basic land-use pattern for northeast Georgia required examination. Documents concerning the agricultural history of the state of Georgia, the upper Savannah River region, and Elbert County, in addition to literature concerning the demographics of the regions, were examined in the Main Library and Science Library of the University of Georgia, Athens, the Elbert County Library, Elberton, Georgia, and the Soil Conservation Service Office and Agricultural Extension Office, both in Elberton.

The available data indicates that three basic patterns of land-use and modification have been operative in northeast Georgia over the last 250 year period. Although the history of Elbert County stretches back to the pre-Revolutionary War period, significant land modification trends do not become apparent until the 1770s when the ceded lands of the Cherokee and Creek were designated by the Georgia Legislature as Wilkes County, and opened to lottery-controlled settlement (McIntosh 1968:10). Land tract sizes tended to vary considerably, though averaging approximately 160 ac, with the majority of the tracts bordering a primary, secondary, or tertiary stream (Bonner 1964). The primary streams, and to a lesser extent the principal secondary streams, were used as the boundary indicators for the Georgia Militia Districts (GMD), the Georgia equivalent to the township and range system employed in other states. Therefore, land tracts were rather irregular in shape depending upon the boundaries of the district and the configuration of the initial land tracts.

It must be emphasized that not all land within the ceded territory was distributed by the lottery system, and that several large land-holdings of greater than 500 ac had already been secured by owners prior to the first lottery in 1777 (Bonner 1964). These larger land tracts tended to front on either the Savannah River, or major secondary streams such as Beaverdam Creek. The orientation of land-use was toward agricultural activity in the bottomlands and utilization of the

upper terraces and uplands as timber sources. The lottery distribution of the smaller land tracts introduced agricultural activity and land clearance in the uplands with an overall agricultural mode of straight furrow farming, the so-called Frontier Agricultural System (Bonner 1964; McIntosh 1968; Range 1954).

Prior to the Revolutionary War, the population and trade center of Georgia had been the City of Savannah area. However, the opening of the ceded lands saw a shift in population toward the upper reaches of the Savannah River. Augusta served as the focal point of a basically agrarian economic base, and by 1790 Burke, Richmond, Wilkes, Franklin, and Greene counties had a combined population of some 52,000 people, not counting slaves (Bonner 1964:48).

Over 80 percent of the population was engaged directly or indirectly in agricultural production. The primary crops were cotton, in the bottomlands and first and second terrace locations along the Savannah River and its primary tributaries, and tobacco and a limited amount of cotton in the uplands and upper terraces. Despite the focus on agricultural production, close to 75 percent of the land in 1800 was still in forest, though the percentage greatly decreased between that year and about 1840, when only 50 percent remained virgin wilderness (Bonner 1964; Range 1954; Georgia Magazine 1965; Lucas 1979).

The Frontier Agricultural System was the first of the three basic patterns of land-use and modification in the region, and is the one which undoubtedly most severely affected prehistoric site integrity. The system is based on the premise of straight line furrowing and minimum plow depth. Although perhaps not consciously acknowledged by the participants at that time, the underlying theory of the system was that the land would be used until exhausted, since a seemingly unlimited supply of land was available. The straight furrowing resulted in virtually uncontrollable erosion, and the growth demands of the two primary crops, cotton and tobacco, were such that by 1830 vast tracts of land were denuded of the vital topsoil layer.

By 1850 John Farror, a Georgia State Legislator and agrarian reform proponent, recommended that the badly impacted lands of northern Georgia be planted in pine trees to rebuild diminishing supplies of timber, control erosion, and begin to re-establish an appropriate economy to lands which were now considered unsuitable for agricultural production. Between 1830 and 1855 over one-half of the population of Elbert County alone had emigrated to Alabama, Mississippi, and states and territories further west (Lucas 1979; Range 1954). Yet reorientation and conservation attempts were slow in coming, with a major portion of the population of Elbert County, for example, still engaged in agricultural or timbering (land-clearing) activities, though the former in the uplands was yielding only minimal crops. By this period, the fertile topsoils had been almost totally lost, and essentially B horizon soils were being tilled (Georgia Magazine 1965:18; McIntosh 1968).

The institution of such conservation measures as contour plowing, crop rotation and fallowing, and tree replanting began in the 1850s only to be abandoned with the demands of the Civil War (Bonner 1964). By the close of the war, the second pattern of land-modification was in operation, one of limited, deep furrow farming, augmenting incomes derived primarily from timbering. Loblolly pine and yellow poplar in addition to slash and longleaf pine were the primary economic species, with the former especially well-adapted to the highly alkaline soils (Georgia County Agent's Handbook 1970).

The third pattern, basically a variation of the second, was introduced following World War II, when chemically based fertilizers allowed for the clearance of upland and upper terrace secondary pulp forests and a resurgence of agricultural activity. Each of the patterns then is essentially a variation of the same theme of timbering activity for land clearance, agricultural activity, deactivation of the agricultural pattern and reintroduction of forestry activities. The result has been the somewhat constant modification and utilization of the land during the historic period, with the activities leading to large-scale erosion only partially controlled by conservation measures. Presumably, the majority of archaeological sites throughout the region have been affected by some portion of the cycle, and, as a result, only a minimum number of sites yield unimpacted deposits.

The Beaverdam Group locale (Figure 3) has not been immune to the effects of land alteration. Agricultural activities have been undertaken in the past at all four sites, and in portions of at least one site, 9EB207, evidence of deep plowing was found.

In addition to these factors, at least three of the four sites in the Beaverdam Group (9EB92, 9EB207, and 9EB208) have been the scene of repeated collection by local and nonlocal amateurs (Fred Wansley, personal communication). Even during our investigations, we were visited by several individuals who had personally collected a number of artifacts from the Beaverdam Group as well as other sites in the RBR project area. One of these persons brought along several examples of lithics he had collected from 9EB208. Clearly, amateur retrieval of materials, particularly diagnostics, over a lengthy period of time will have a decided affect on our interpretations of the cultural affiliation and associated assemblage at a given site. This is especially true when the site lacks substantial deposits such as midden, or where midden has been destroyed by plowing and deflation.

Summary

Our investigations at the Beaverdam Group were specifically aimed at meeting the contract requirements agreed upon by NWR, IAS, and the Savannah District Corps of Engineers. The work was designed to address research concerns on a site-specific basis as well as general research issues pertinent to various periods of prehistoric activity in the project area.

In addition to the principal archaeological focus, consulting expertise in geomorphology and paleobotany were retained for specialized analysis and report production.

In the following chapters, the objectives and basic approach to investigations at the Beaverdam Group are presented. Chapter Five is one of the more important sections of the report since it is there that previous investigations, research issues, current work, and site interpretations are presented for each of the sites investigated by NWR. Chapter Six is an interpretation of the regional implications of the combined site data from the Beaverdam Group.

CHAPTER TWO

CULTURE HISTORY

At the time of our investigations, a number of other studies were being conducted in the project area and several have gone into Phase II data recovery. The consequence of these recent investigations is an ever-expanding data base for the RBRMRA and, in a regional sense, the Georgia/South Carolina Piedmont. When all of the reports on the multi-faceted RBRMRA cultural resources program are available, the culture history of the area will likely be critically reviewed by many investigators. In full recognition of this fact, the cultural overview presented in this chapter has as its focus the Piedmont in general and the RBR study area in particular. Where appropriate to understanding cultural dynamics, we have made reference to pertinent events in other areas of the Southeast.

The dates used in the discussion follow those suggested by Griffin (1978). Although we recognize that, particularly in the preceramic periods, there is some controversy over ending and beginning dates, we feel that Griffin's temporal framework is the most appropriate.

The Lithic Stage

The earliest evidence of human cultural remains in North America appears to coincide with the end of the Pleistocene geological epoch. This time period has been designated the Lithic Stage, with two cultural traditions of stone tool manufacture subsumed under the stage heading (Willey and Phillips 1958:79):

1. the so-called "Pre-Projectile Point" (or Early Lithic), characterized as consisting of "unspecialized and largely unformulated core and flake industries, with percussion the dominant, and perhaps only, technique employed;
2. the Paleo-Indian Tradition, characterized by industries exhibiting more advanced "blade" techniques of stoneworking, with specialized fluted or unfluted lanceolate points the most characteristic artifact types.

To provide a time framework for discussing the Lithic periods, we will follow the division of the Early Lithic, or pre-projectile point period, as beginning sometime during the Pleistocene and ending around 12,000 B.C., at which time the Paleo-Indian period first appears and lasts until about 8000 B.C.

The Early Lithic Period

The Early Lithic period is poorly understood not only in terms of temporal duration, but also in terms of the associated cultural inventory. Lacking projectile points, this period is characterized by crude, basically chopper tools. In the West, several complexes such as San Dieguito I and II and Amargosan, have been identified from surface finds and are generally well accepted by researchers (c. Rogers 1938; Jennings and Norbeck 1964). Unfortunately, that is the western data. The very limited data from the Southeast do little to increase our understanding of the Early Lithic period; and in general, artifacts associated with this industry are usually represented by problematic surface finds that lack clear stratigraphic association. These crude tools, and perhaps tool complexes, have been collectively called the "Lively Complex." Although reported from Tennessee (Josselyn 1965; Dragoo 1965, 1973), Alabama (Lively 1965; Josselyn 1967), Louisiana (Gagliano 1964), and elsewhere in the Southeast (Dragoo 1967:5-8), to our knowledge, no pre-projectile point occupations have been reported for the Georgia/South Carolina Piedmont.

The Paleo-Indian Period

In contrast to the Early Lithic period the Paleo-Indian period is better represented in the Southeast. The most well-defined of these cultural complexes are characterized by the manufacture of large, thin lanceolate projectile points made on bifacially worked blade flakes. Generally, these lanceolate points exhibit a "flute" or channel flake scar at their bases which apparently represents a specialized means of hafting them. The best-known fluted point complexes are Llano, Clovis, Folsom, and the various Plano traditions, all of which were first identified in the West where they have been found in association with kill-sites. At present, the West is still the area in which the fluted point complexes are most celebrated. This is because few kill-sites have been found in the Southeast. Although Paleo-Indian finds

are relatively well represented in the Southeast, the clear majority are either isolated or scattered surface finds or located in mixed, multi-component sites that lack good stratigraphic definition of components.

Evidence of Paleo-Indian occupation in the RBRMRA is scarce despite the quantity of investigations that preceded the 1980 field seasons. Gardner and Rappleye (1980) indicate that private collectors have Paleo-Indian points from the RBR area and subsequent data indicate that fluted points have been recovered from 9EB91 and 38AN8. Despite this, points diagnostic of this period are sorely underrepresented. Distributional studies have revealed that fluted points are rare in the Georgia/South Carolina Piedmont and when present, tend to be found in the lower Piedmont near the Fall Line (Michie 1977). Wauchope (1966) also points to the transition zone in northwest Georgia between the Piedmont and the Blue Ridge province as yielding substantial Paleo-Indian remains.

Taylor and Smith (1978) point out that the low incidence of Paleo-Indian remains from the Georgia/South Carolina Piedmont is surprising in light of the abundance of these remains in the North Carolina Piedmont. It is possible that the paucity of Paleo-Indian sites partially results from the concentration of work in floodplain areas and alluvial terraces that may either be too young to have hosted Paleo-Indian occupation or that produce a buried surface situation in which the materials are beneath the levels traditional subsurface testing can reach on a survey or even limited testing level of effort.

It is difficult to imagine that this area, so seemingly rich in landform and environmental diversity, would have been shunned by Paleo-Indian groups. One explanation may be the fact that the area lacks cryptocrystalline lithic sources, characteristically sought out by Paleo-Indians for tool manufacture.

The Archaic Stage

The Pleistocene climate which characterized the Paleo-Indian era gave way in the Archaic Stage to the milder conditions of the Holocene and resultingly, greater diversification in faunal and floral elements. Although we are still uncertain of the subsistence strategies characterizing the Paleo-Indian groups in the Southeast, the Archaic Stage is taken as a reflection of the human technical adaptation to the new and more varied environmental conditions ushered in with the retreat of the final Pleistocene glaciation after about 8000 B.C. In the Southeast, this stage is divided into three periods.

The Early Archaic Period

As mentioned in the beginning of this chapter, we have chosen to follow Griffin (1978:58) in dating, hence the Early Archaic Period is placed between 8000 B.C. and 6000 B.C., although other scholars have

suggested that a closing date of 5000 B.C. (cf. Willey 1966:252) is more appropriate.

The Early Archaic period is generally viewed as reflecting a subsistence shift from the Paleo-Indian period; however, artifactually recognized changes, seen in the appearance of Hardaway-Dalton, Palmer, and Kirk projectile points, may reflect alterations in not only the subsistence base but in land-use patterns as well. For the study area, this may include increased utilization of upland as well as riverine resources in the Piedmont drainage systems (Hanson et al. 1978).

In addition to the projectile point types, the technological repertoire of Early Archaic period cultures is generally characterized by:

both hand and slab stones for grinding; hammerstones; large ovoid to triangular blades; scrapers; flint drills with expanded or cylindrical bases; blades; gravers; chipped stone adzes or gouges; chipped grubbing tools or hoes; and pebble pendants. Very few bone awls or other tools have been recovered (Griffin 1978:58).

Mortars have been noted in Early Archaic contexts (J. W. Griffin 1974; Chapman 1977) and flaked stone tool types, such as "Dalton adze" described by Morse (1973), are likely Early Archaic prototypes for the later ground and polished versions of those tool forms.

Summarizing the archaeological data bearing on subsistence between 8000 B.C. and 6000 B.C., Stoltman (1978:714) concludes:

the white-tailed deer had become the principal game animal hunted throughout the East, supplemented by a variety of smaller game, including rabbit, raccoon, opossum, squirrel, beaver, muskrat, and turkey (e.g., Parmalee 1962; Fowler 1959:61-65; Chapman 1975:107; J. W. Griffin 1974:81-90). Fish, shellfish, and plant foods were surely also gathered but presumably were decidedly secondary food sources, for the archaeological evidence of their utilization is extremely meager.

He indicates that the increased dependence on plants and shellfish in the Middle Archaic supports a proposition that Early Archaic subsistence was "transitional between the more specialized hunting pattern of the Paleo-Indian era and the more sedentary gatherer-hunter pattern" (Stoltman 1978:714) of the subsequent Middle Archaic period. Stoltman's argument is not without detractors, particularly Morse and Morse (1978:735), who feel the evidence is insufficient to judge the

relative importance of gathering during either the Paleo-Indian or Early Archaic periods. On this point, the authors of this report join the Morses' in believing that regardless of one's personal assessment of the "state-of-the-art" in determining subsistence patterning in the Early Archaic period, better understanding of this issue will only emerge as the data base broadens.

This is true of the Southeast in general and the RBR project area in particular. Taylor and Smith (1978) reported 43 Early Archaic sites from their sample survey results; however, the 1980 field investigations resulted in only four excavated sites yielding diagnostics of this period; 9EB91, 9EB219, 9EB259, and 9EB382 (RBR meeting, December 1980). Of these, possible stratification may be present at 9EB91, 9EB259, and 9EB382. The component at 9EB219 was identified by only a single projectile point. Excavation of the former three sites may yet provide the types of data necessary to understand further the nature and intensity of Early Archaic settlement in the project area.

The Middle Archaic Period

The Middle Archaic period (6000 to 4000 B.C. after Griffin 1978), is differentiated in the Southeast from the Early Archaic primarily by changes in projectile point morphology and an elaboration of the basic tool kit. Subsistence appears to have been based on a pattern of gathering-hunting-fishing. Although Chapman (1977) found that gathering of acorns and hickory nuts began in the Early Archaic at Tellico, exploitation of vegetative resources is apparently expanded in the Middle Archaic to include walnuts. Greater site frequency has also been taken to suggest population increases over the Early Archaic. (However, a caveat may be in order here since deep testing and excavation at the Tellico Reservoir in eastern Tennessee revealed Early Archaic components in formerly unsuspected numbers - cf. Chapman 1976a, 1976b).

Culturally, Griffin cites the emergence of a variety of new artifact types as a distinguishing characteristic of the Middle Archaic. He notes:

the appearance of such forms as grooved axes, stone pendants, and early bannerstone forms, and such grinding and pounding tools as the bell pestle. A well developed bone industry of awls, projectile points, flakers, and atlatl hooks is assigned to the Morrow Mountain Complex at the Stanfield-Worley Shelter in northern Alabama...A bone industry is also recognized in the Eva Complex of west Tennessee...and the first dog burials.... (Griffin 1978:59).

Workmanship appears to improve as evidenced by the stone grinding, polishing, and bone-working technologies. Quality advances as well as

the emergence of new tool forms has been taken to represent either the adoption of new economic pursuits and activities or refinement of previously existing ones. The dog burials may be considered a symbol of the relationship between man and that species, a relationship not without economic implications of its own.

As we mentioned above, increased population has been suggested for the Middle Archaic period, but this conclusion is predominantly based on greater site density. The Tellico data notwithstanding, the most often cited reason for apparent population growth was an increased dependence on shellfish and other aquatic resources that enabled Middle Archaic groups to occupy sites on a more stable, sedentary basis.

Stoltman (1978) definitely sees the growing dependence on shellfish as affecting not only settlement, but subsistence strategies in general during the Middle Archaic. He emphasizes that this does not imply an increased diversity in the food species exploited, but a relative increase in the importance of gathering over hunting. This position may be supported by evidence which suggests the seasonal storage of foodstuffs. Storage pits, which first appear in the Middle Archaic, suggest increased sedentism and, by implication, increased gathering activities that would facilitate this sedentism (J. W. Griffin 1974; DeJarnette et al. 1962).

It is important to note, however, that the Middle Archaic shell gathering groups apparently prevalent in areas such as the middle Tennessee River Valley (Lewis and Kneberg 1958) are not present in the Georgia/South Carolina Piedmont or, for that matter, the Coastal Plain. Consequently, there is no known direct ancestral precedent for the emergence of the Late Archaic Stallings shell mound culture along the Savannah River, although Stoltman (1972, 1974) has argued that the origins of Stallings may lie to the west in the Tennessee River Valley, where intensive shellfish exploitation began around 5000 B.C. Knowledge and subsequent utilization of shellfish resources supposedly diffused east, reaching the Savannah River area around 3000 B.C., where it transformed the existing society.

There is also a possibility that the Late Archaic Stallings manifestation developed out of a non-shell gathering Middle Archaic. This is particularly feasible when viewed in relation to Jenkins (1974) concepts of the major procurement systems in Limited Spectrum Economic systems. Basically, the economy of these groups consists of three procurement systems: 1) shellfish collecting and fishing; 2) hunting; and 3) harvesting of plant foods (Jenkins 1974:183-185). Each of these strategies is carefully scheduled according to the seasonal limits imposed on humans by the nature of the wild resources.

Unfortunately, the Middle Archaic period is not very well understood in the Georgia/South Carolina Piedmont or the Coastal Plain. This is primarily due to an absence of stratified deposits and systematic investigation of Middle Archaic sites or components. As evidenced by projectile points noted by Taylor and Smith (1978) and

TRC (Gardner and Barse 1980), the Middle Archaic is represented in the RBR project area, but, beyond the rudimentary identification of diagnostic point types, very little is known about the nature of these occupations. There are no data on settlement patterning, subsistence strategies, or seasonality. Whether the conclusions drawn by the above authors for Tennessee and Alabama are applicable to the Middle Archaic in the RBR project area remains to be proven. Several sites excavated during the 1980 field season (9EB76, 9EB91, 38AB22, 38AB91, and 38AB288) may provide the needed data to fill some of these gaps.

The Late Archaic Period

The Late Archaic period in the Southeast is dated between about 4000 and 500 B.C., and is divided into two phases, defined on the absence or presence of fiber-tempered ceramics. The initial phase of the Late Archaic in the project area possesses characteristics similar to both the "Broadpoint" horizon (Turnbaugh 1975) and the Shellmound Archaic (Lewis and Kneberg 1958). Within these broad cultural groupings there are at least two Late Archaic adaptive strategies present in the Fall Line region of Georgia. The first, apparently developing from an indigenous base, is a lithic culture, termed "Old Quartz," and the second is the preceramic Late Archaic. While the majority of the "Old Quartz" culture sites appear in the uplands, away from major rivers, the preceramic Late Archaic, which possesses a more varied tool inventory, including groundstone and "netsinkers," is present both in upland and riverine settings.

The former has obvious affinities to both the indigenous Middle Archaic and "Broadpoint" horizons, while the latter, preceramic Late Archaic is culturally similar to the Shellmound Archaic. While exploitation of riverine resources is apparent in the preceramic Late Archaic, including the utilization of shellfish and fish, the intense exploitation of shellfish apparently coincides with the introduction of ceramic manufacture (DePratter 1975:12). The latter phase of the Late Archaic is dominated by the various subphases of the Stallings manifestation (Stallings I, II, III) with Stallings I apparently the transition from all lithic (Shellmound Archaic) to lithic/ceramic assemblages (Stoltman 1974).

The "Old Quartz" culture (Caldwell 1958:22-23) is still ill-defined temporally, though Waring in his discussion of the Archaic (Williams 1968:253) supplies a summary of projectile points from the culture in his various papers. The present data would suggest that the "Old Quartz" culture, with its reliance upon quartz tool manufacture, represents primarily an upland, hunting adaptation. Its tool kit does not appear to include such categories as bannerstones, steatite "netsinkers," or groundstone, all of which are present in the preceramic bearing strata underlying the ceramic Stallings occupations along the Savannah River (Claflin 1931; Stoltman 1974).

Preceramic Late Archaic occupations are represented at the Stalling's Island site, where the tool inventory includes grooved

axes, steatite "netsinkers," large rhyolite projectile points, bone awls and pins, and fish hooks (DePratter 1975:12). While Caldwell (1958; as cited in DePratter 1975:12) suggests no significant change in the tool inventory between preceramic Late Archaic and ceramic Late Archaic, others have indicated that the large rhyolite projectile points may be replaced by smaller, quartz or flint points, and that the incidence of steatite "netsinkers" (cooking stones) may actually decrease in the ceramic levels (DePratter 1975:12).

As noted earlier, the distribution of "Old Quartz" culture sites is in the uplands, and preceramic, Shellmound-like Archaic sites are also usually situated on bluffs or ridges overlooking streams and the surrounding areas (Caldwell 1954). This distribution was thought to be in contrast to the distribution pattern of ceramic Late Archaic sites, which apparently occurred predominately in riverine and coastal settings.

These latter sites are distributed in two clusters -- one along the Savannah River, near the Fall Line, and the other on the Georgia-South Carolina coast (Stoltman 1972, 1974; Miller 1949; Hemmings 1972a, 1972b; Phelps 1968; Crusoe and DePratter 1976). Recent work by Anderson (1975) on the Coastal Plain and Campbell et al. (1981) in the Fall Line Sand Hills Province of Georgia, however, has shown that the distribution of Late Archaic ceramic Stallings sites is more widespread than was formerly believed and types of sites will, upon further intensive investigation, no doubt reveal greater variation than was previously assumed. Therefore, it would seem that the continuation of subsistence strategies between the preceramic Shellmound affiliated Late Archaic and the Stallings manifestations is demonstrated in the distribution of sites, and that the pattern of site distribution by cultural affiliation is not as clearly delineated as originally thought.

The most often noted riverine sites consist of mounds of shell and loam, which apparently were built up over many years, while along the coast, sites face the inland marshes protected from the ocean. It should be noted here that while the Stalling's Island site has a preceramic Late Archaic occupation, not all of the shell mound sites have like occupations. Quite obviously, the work of Campbell et al. (1981) and Anderson (1975), to name two, has likewise demonstrated that not only preceramic Late Archaic sites occur in upland, non-riverine settings.

It is both the environmental setting and tool inventory present in Shellmound Late Archaic riverine sites which argues most convincingly for the applicability of the Jenkins (1974) and Stoltman (1972) subsistence models and for continuity between preceramic Late Archaic and ceramic Late Archaic occupations in riverine settings. It is the introduction of late Archaic ceramics into the technological repertoire of the peoples to which we now focus our discussion.

The Savannah River Formative: The origins of the fiber-tempered ceramic tradition on the Eastern Coastal Plain have not been resolved, though investigators have postulated Circum-Caribbean contact (Reichel-Dolmatoff 1972; Ford 1966; Willey 1971) and independent invention (Stoltman 1972; Walthall and Jenkins 1976). The validity of neither has been proved. What is known about the tradition is that circa 2500 B.C. Late Archaic peoples along the Savannah River began the manufacture of ceramic vessels. Within a thousand years or less similar fiber-tempered ceramics are found in northern Florida, the Lower Mississippi Valley, the Upper Tombigbee River, and the Middle Tennessee Valley, with each area exhibiting local modifications on the basic theme (Figure 4). In the same time frame the technological expertise had been achieved which allowed for the introduction and accepted use of new manufacturing techniques, decorative modes, and clay types (Walthall and Jenkins 1976).

The introduction of ceramics has traditionally been considered as the hallmark of the Woodland period in the eastern United States (Bullen 1972; Ford and Willey 1941). Yet, investigators as early as Claflin (1931) had opted for differentiating what appeared to be a pre-Woodland ceramic horizon. In Claflin's case, based on work at the Stalling's Island Mound, he classified cultural remains which included fiber-tempered ceramics, under the rubric "Stalling's Island Peoples," differentiating it from the "Later Pottery" levels at the site, which included paddle-stamped wares.

Caldwell (1952: 312-314) placed Claflin's "Stalling's Island Peoples [Culture]" within the Savannah River Focus of the Archaic. Though Caldwell did not discuss the composition of the preceramic Savannah River Focus cultural assemblage to any extent, he did note that "...the Stallings Island Culture is now recognized as a component of the Savannah River Focus," which by his placement would assign it to the Archaic. Ford (1966), in his summary article on the early ceramic cultures of Georgia and Florida, placed Stallings fiber-tempered and early sand-tempered wares (Thom's Creek/Awendaw) under the heading of Savannah River Formative, differentiating it from the preceding lithic-only stage of cultural development.

Stoltman (1972) placed the Stallings ceramic series within the Late Archaic, though he distinguished it from preceramic Late Archaic by naming it the Stalling's Island Culture. Unlike Ford, Stoltman did not include any of the early sand-tempered wares within the definition of the culture, but rather opted to include preceramic assemblages which possess all other characteristics of a Stallings assemblage. He offered a tripartite division: Stallings I (preceramic), Stallings II (plain fiber-tempered ceramics), and Stallings III (plain and decorated fiber-tempered ceramics) (Stoltman 1972: 55). His reported dates for all three phases would place it within the Late Archaic.

Yet investigators have continued to grapple with the concept of ceramics in association with essentially Archaic tool assemblages and subsistence strategies. Walthall and Jenkins (1976) have proffered

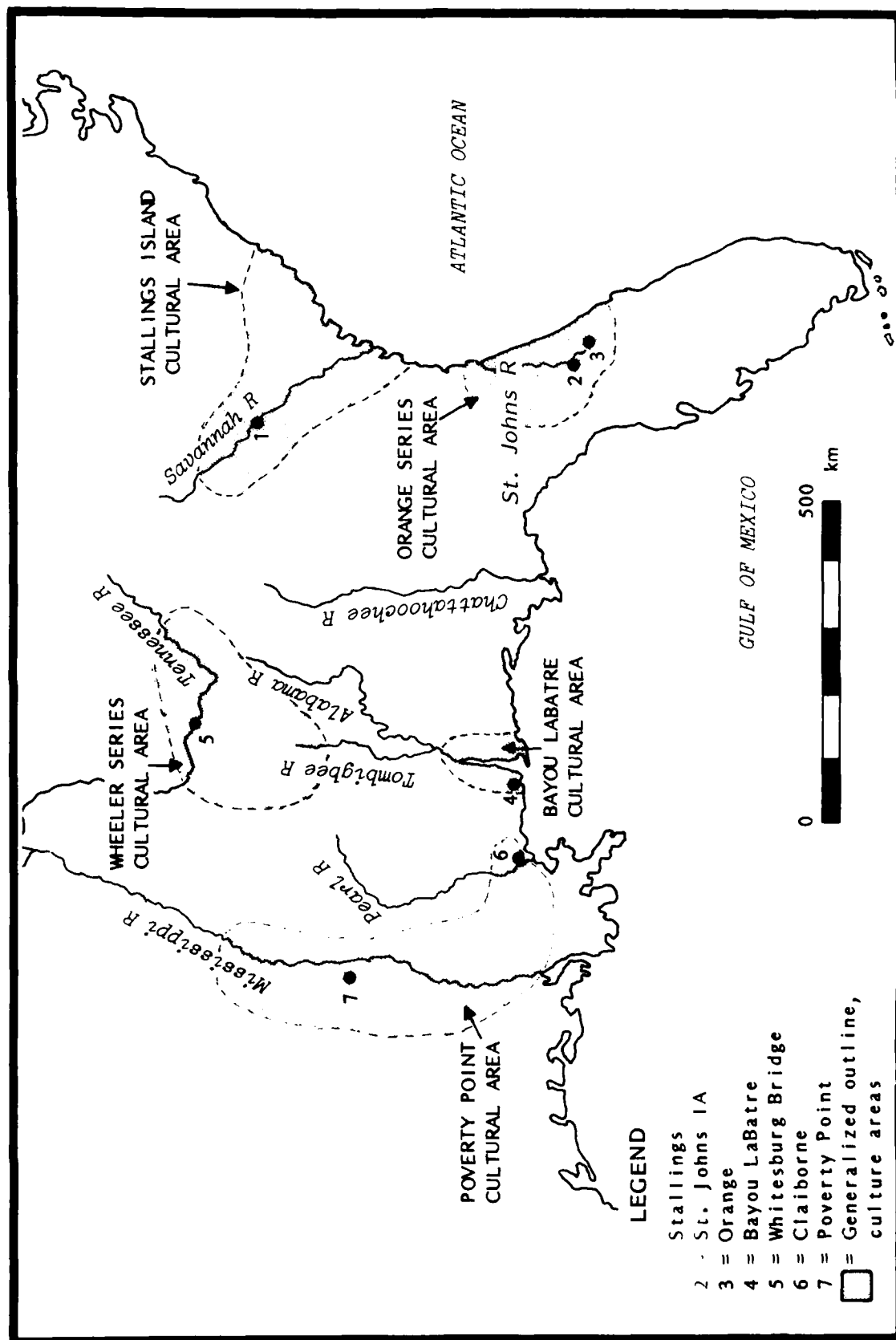


FIGURE 4. FIBER TEMPERED CERAMIC CULTURE AREAS IN THE SOUTHEAST. (Data from Walthall and Jenkins 1976; Stoltman 1974; Milanich and Fairbanks 1981)

the concept of the Gulf Formational Stage as an "...intermediate cultural stage...between the Archaic and Woodland," (Walthall 1980:77) which begins in their eastern region (eastern Alabama to the Atlantic coast) with the "appearance of fiber-tempered pottery and end[s] with the spread of southern Appalachian and northern ceramics into the Southeast" (Walthall 1980:78). The Gulf Formational Stage is divided into three periods: Early (2500-1200 B.C.), Middle (1200-500 B.C.), and Late (500-100 B.C.). Quite obviously, their suggested dates encompass both the Late Archaic and the Early Woodland as traditionally accepted in the Fall Line region of Georgia.

Because significant changes in cultural assemblages occur during the Early Woodland period in the Fall Line region, it would be fallacious to adopt part and parcel the concept of the Gulf Formational Stage to the area. Rather it would seem more realistic to utilize the concept of the Savannah River Formative, to encompass the portion of the Late Archaic when ceramic manufacture has been introduced into the cultural assemblage. Further, for reasons which will be discussed below, the definition of the Savannah River Formative should include in its final stage of development the introduction of sand-tempered ceramics, specifically Thom's Creek and Awendaw.

Stoltman (1974) indicates that the initial appearance of the fiber-tempered Stallings Plain began about 2500 B.C., with the concept of ceramic manufacture gradually spreading along the western Gulf coast to the west. Orange series types in the Florida Panhandle are firmly dated to before 1100 B.C., and Wheeler series types appear in the Middle Tennessee River Valley, the Upper Tombigbee River, and the Lower Pearl River all about 1100 B.C. (Walthall 1980).

While the concept of ceramic utilization appears to have spread generally east to west, west to east generated interaction is also apparent. Red jasper beads, from the Louisiana region, have been found at eastern Wheeler and Orange series sites (Walthall and Jenkins 1976). It appears, however, that the west to east influence is most apparent following the introduction of sand-tempered series (Bullen 1972).

The initial sand-tempered series, which are at least partially contemporaneous with the manufacture of fiber-tempered ceramics, include such series as Thom's Creek, Awendaw, and possibly Refuge, found in the Savannah River region and the Coastal Plain of South Carolina and Georgia; St. Johns from the northeastern Florida peninsula; Norwood (perhaps most aptly designated a semi-fiber-tempered ware) from the panhandle of Florida; Bayou La Batre from the Mobile Bay region; Tchefuncte from the Lower Mississippi River Valley; and Alexander series from the Tombigbee drainage. These series are dated, east to west, from 1300 B.C. to between 1000 and 600 B.C. (Walthall and Jenkins 1976).

The inclusion of early sand-tempered series such as Thom's Creek, Awendaw, and possibly Refuge series, within the Savannah River

Formative is based on the contemporaneity of dates for these series with dates for fiber-tempered ceramic occupations. Stoltman (1972:40) gives dates ranging from 2515 \pm 95 B.C. to 1750 \pm 250 B.C. for the occurrence of fiber-tempered ceramics in the Savannah River region. At the Small Ford site, in Beaufort County, South Carolina, a date of 1940 \pm 110 B.C. was assigned to a Thom's Creek occupation, which would minimally suggest that "...sand-tempered, punctated ceramics on the South Carolina Coast coexisted with the Stallings series of the Georgia coast" (Stoltman 1972:56). The Yough Hall site, coastal South Carolina, yielded a date of 1820 \pm 130 B.C. for an Awendaw occupation, though Stoltman feels that additional information should be evaluated before the date is fully accepted (Stoltman 1972:56).

Trinkley (n.d.; Notes of Coastal Carolina Aboriginal Pottery Conference, Charleston Museum, August 20-21, 1982) also argues for at least the partial contemporaneity of the Stallings and Thom's Creek series, and at the recent Coastal Carolina Aboriginal Pottery Conference, presented a date of 2220 \pm 350 B.C. for a Thom's Creek occupation, also in Beaufort County, South Carolina.

While the dates just presented for Thom's Creek and Awendaw series occupations come from Coastal Plain sites, data from inland sites suggests a similar pattern. To the east and south of the RBRMRA project, Anderson et al. (1979:92) defined Late Archaic/Early Woodland occupations on the basis of Stallings fiber-tempered and Thom's Creek sand-tempered ceramics, Savannah River Stemmed, Thelma and possibly Gary points. Although Stoltman (1974) indicated that the Stallings components in the Groton Plantation area are stratigraphically earlier than the Thom's Creek types, Sutherland (1974) demonstrated that at least along the Edisto River the reverse was true. The implications of Sutherland's data are not fully understood, though they may suggest that the development and/or introduction of sand-tempered ceramics was contemporaneous with the manufacture of Stallings fiber-tempered ceramics.

Anderson's (1975) synthesis of ceramic distributions for the South Carolina and upper Georgia coast, tends to see the region from the Savannah River to the Edisto River as an interface between the fiber-tempered and sand-tempered incised-punctated ceramic traditions. The conclusion was later reinforced by his work at Cal Smoak (Anderson et al. 1979) and by subsequent work in the Augusta area where the co-occurrence of Stallings and Thom's Creek types has been identified (W. Dean Wood, personal communication 1980; Campbell et al. 1981).

Dates so far achieved for the Stallings and Thom's Creek sites and occupations appear to reflect a temporal overlap between the two complexes (Anderson et al. 1979; DePratter 1975). Each of these traditions has been identified within the RBRMRA, in addition to Stallings II, basically all plainware, and Stallings III, marked by fiber-tempered incised-punctated types.

While there are obviously distinctive early ceramic traditions within the region of the RBR area, the remainder of the cultural assemblages associated with the various ceramic traditions lack startling differences. For the most part the assemblages are characterized by the use of soapstone (steatite) for both vessels and cooking stones, basin mortars, phyllite and slate knives, round or stemmed scrapers, three-quarter or full grooved axes, and polished celts, in addition to stemmed projectile points of types like Thelma, Gary, and traditional and small Savannah River (Anderson et al. 1979; Wauchope 1966). The nonceramic assemblage then differs little from the typical preceramic Archaic assemblage, a fact which may argue for the continuation of basically the same pattern of food gathering and lifestyle. The point of departure for the Savannah River Formative from the Archaic tradition is the introduction and accepted use of ceramics by the indigenous populations.

The Woodland Period

It should be stated from the outset of the discussion on the Woodland Period that the transition from the Late Archaic Savannah River Formative to Early Woodland is not well defined, and the composition of Early Woodland cultural assemblages appears to contain considerable retention from the preceding Late Archaic. It would appear that by the onset of the Early Woodland in northern Georgia, two distinctive cultural traditions were present (Caldwell 1958). The so-called Middle Eastern Tradition was omnipresent throughout the deciduous forests of the East, as far north as Illinois and Ohio and continuing south to the Fall Line of Georgia. The various regional foci of the tradition were defined by Caldwell (1958) on the basis of similarities in fabric-marked ceramics, boatstones, bar gorgets and medium-sized stemless triangular points. It was Caldwell's feeling that a Middle Eastern Tradition presence in north Georgia was not seen until the Early Woodland, when Dunlap Fabric Impressed ceramics marked the presence of Kellogg Focus sites (Caldwell 1958:23).

Contemporaneous with, and lasting longer into the Early Woodland, was the Southern Appalachian Tradition. The geographical distribution of the tradition was restricted to the southern Piedmont and areas south of the Fall Line, and the greater environmental diversity found in those regions has led Caldwell (1958:35) to postulate a more generalized subsistence pattern for the Southern Appalachian Tradition than for the Middle Eastern Tradition. The two traditions did share characteristics, including the use of boatstones, two-hole gorgets, short conical steatite tubes and pipes, and the manufacture of ceramics (Caldwell 1958:35). One of the markers for the Southern Appalachian Tradition in the general project vicinity is the loosely defined Mossy Oak Simple Stamped ceramic type.

Caldwell's placement of both traditions in the Early Woodland was at least partially refined by subsequent work conducted by Wauchope (1966) throughout the northern Georgia region, basically west of the

RBRMRA. Wauchope's work involved little in the way of excavation, and, therefore, his conclusions are based principally upon survey data. However, careful artifact analysis and comparisons of assemblages with those in excavation contexts allowed Wauchope to divide the Early Woodland into two phases, designated the Lower and Upper Early Woodland (Wauchope 1966:433-436). The simple stamped, thin-walled types such as Mossy Oak Simple Stamped were placed toward the latter portion of the Lower Early Woodland, due to the presence in superposition of Mossy Oak Simple Stamped over fabric marked ceramics at the Two Run Creek site (9BR3).

Caldwell (1958) has postulated, with good reason, that at the very least the fabric-impressed tradition originated much to the north of Georgia, and that its appearance in the north Georgia area may actually represent a migration of fabric-impressed ceramic manufacturers into the region. Though, as has been pointed out, there is no significant change in the remainder of the cultural assemblage from the preceding Archaic period, the artifactual composition of Kellogg Focus sites does include items which significantly altered and refined the Woodland lifestyle.

Caldwell postulates that the Kellogg Focus medium-sized isosceles triangular point form, sometimes with a concave base, is the herald of the use of the bow and arrow. His argument for the presence of the bow and arrow is strengthened by his feeling that the two-hole gorget present at Kellogg Focus sites is potentially usable as an arm guard. In addition to changes in material culture, shifts in storage and residence patterns also occurred. Garrow (1975:18) notes that Kellogg Focus sites have also produced both bell and cylindrical shaped storage pits, in addition to large stone-lined cooking pits and circular house patterns.

As previously mentioned, there were at least two other major ceramic series present in the southern Piedmont region. The lightly sand-tempered incised and punctated types, typified by the Thom's Creek series, apparently is manufactured into the Early Woodland (Anderson 1975). Sand/grit-tempered simple stamped types, initially exemplified by such types as Mossy Oak Simple Stamped and later by Deptford Simple Stamped, make their initial appearances during the Early Woodland.

The least well-defined of the types is the Mossy Oak Simple Stamped which has been identified in excavation contexts with fabric-impressed types (Wauchope 1966). Yet, as Waring (Williams 1968:329) points out, the type never achieves other than minority status at any site on which it occurs. Further, Garrow (1975) feels that the type should be reconsidered as such because of its obvious similarity to more well-defined types like Deptford Simple Stamped.

Thom's Creek Plain and Incised or Punctate occur as companion types in both Stallings III (Anderson et al. 1979) and Deptford (Anderson et al. 1979; Trinkley 1980) pottery bearing sites. The Thom's Creek decorative styles are obviously a continuation of those

initiated with the Stallings III fiber-tempered types, and the techniques of surface decoration are accepted in later contexts when the predominant decorative form is paddle-applied.

Caldwell and Waring (1939) originally defined four types within the Deptford series: Simple-Stamped, Linear Check-Stamped, Bold Check-Stamped, and Brewton Hill Complicated Stamped. Subsequent work has added two additional types, Cord-Marked and Dentate Stamped, to the series, with a third, Plain, also considered, though not fully described (Trinkley 1980; DePratter 1976). The series occurs in South Carolina, Georgia, and Florida, though apparently significant differences in the paste and temper appear on a subregional basis (Griffin 1945). The series importance, beyond the obvious significance of a new ceramic tradition, is the fact that its initial appearance in the various regions predates the initial appearance of the Kellogg Focus fabric-impressed types, which is more restricted in distribution to the northwest, north central, and Upper Savannah River areas of Georgia.

Garrow (1975) reports C-14 dates of 540 B.C. (2490±100 B.P.) and 630 B.C. (2580±100 B.P.) for the Kellogg Focus Mahan site, in Gordon County, Georgia. Bowen (1980:41) reports dates of 565 B.C. (2515±75 B.P.), 470 B.C. (2420±150 B.P.), and 245 B.C. (2195±120 B.P.) on materials recovered from Kellogg Focus features at 9Ck(DOT)7 in north central Georgia. The range of the dates from 9Ck(DOT)7 are consistent with other Kellogg Focus dates. Bowen (1980:41) does comment that "...a number of Late Archaic Savannah River type points were found on the surface and similar points were also recovered from several of the Kellogg features," which suggests that Savannah River points continue to be manufactured into the Early Woodland, a conclusion also reached by Anderson et al. (1979).

These dates do raise the question of the beginning date of the Early Woodland. The Kellogg Focus dates suggest that the initial appearance of fabric-impressed wares is sometime around 650 B.C. Milanich (1971:143) begins his Deptford phase at approximately 600 B.C., while DePratter (1975; n.d.: Notes of the Coastal Carolina Aboriginal Pottery Conference) suggests a beginning date for the Early Woodland Refuge sequence on the Georgia coast at approximately 1100 B.C. The latter date coincides with Anderson's (n.d.: Notes of the Coastal Carolina Aboriginal Pottery Conference) postulated beginning date of about 1000 B.C. for Early Woodland in the Lower Santee River, South Carolina.

There is obviously variability in the suggested beginning dates for the Woodland. For example, Anderson (1979) at 38Lx5, in the Fall Line area of South Carolina, secured dates of 1240±210 B.C. (MASCA corrected; 2960±130 B.P.) and 1120 B.C. (MASCA corrected; 2860±130 B.P.) on Feature 1 which yielded Otarre Stemmed points. Feature 9, at the same site, yielded a date of 860±120 B.C. (MASCA corrected; 2620±130) in association with Deptford Linear Check Stamped ceramics. Anderson assigns the former to the Late Archaic/Early Woodland

(1979:82,234,236) while the latter is placed tentatively in the Early Woodland (1979:96-97,235), though he states the date seems slightly early.

The data would suggest that the initial appearance of Woodland diagnostics varies by approximately 500 years, dependent upon the area. The appearance of a variety of ceramic styles and traditions in the Early Woodland has been viewed by some investigators (Caldwell 1958) as an indication of migration into the region by several different groups. Presumably such a migration could result in a population rise, yet the results of surveys and excavations conducted throughout northern Georgia (Wauchope 1966; Williams 1968) do not reflect an increased incidence of Early Woodland sites or components, but instead indicate an actual reduction in total site numbers.

Although the trend is reversed in the subsequent Middle and Late Woodland periods for the region as a whole, in the RBRMRA, based on Taylor and Smith's (1978) temporal assignments of sites, the population continues to be low well into the Late Woodland period, although there is a slight increase in sites with Deptford or Cartersville ceramic types, dated in the RBRMRA to the Early and Middle Woodland. The increase in sites dating to these periods does not appear to continue into the later Middle Woodland or Late Woodland periods, a conclusion based on the low incidence of such pottery types as Napier, Swift Creek or Woodstock. Obviously there is not a direct correlation of ceramic types with peoples and cultures, however the Taylor and Smith RBRMRA survey data indicate that traditionally accepted diagnostics for the the various Woodland periods show a differential level of occurrence.

The occurrence of both Cartersville and Deptford components within not only the same area but on the same sites in the project area is interesting in light of the definitional questions concerning the cultural influences seen in Cartersville and Deptford sites. The excavated Deptford sites, like Kellogg Focus sites, reveal the use of bell and cylindrical shaped storage pits. Ethnobotanical material that has been recovered indicates, as is also the case with Kellogg Focus, the utilization of acorns, hickory nuts, and walnuts as dietary staples (Caldwell 1958; Anderson 1979:209-219). The lithic assemblages tend to be nondescript, though as with the Kellogg Focus sites, stemless projectile points make their first appearance.

While the Cartersville ceramic types are similar, if not identical, in execution to other types such as Deptford, significant Hopewell/Copena influence has been identified with the Cartersville Focus, an influence lacking from sites producing late Deptford, Wilmington, and Savannah I ceramic types defined to the east and south of the project area. Baker (1970) reports a 100 B.C. date for a Cartersville pit feature, which would place the focus within the Deptford time range of ca. 500 B.C. to A.D. 500 (Anderson et al. 1979) further to the east. The Deptford time range spans both the Early

Woodland and Middle Woodland, while the Cartersville Focus is most traditionally assigned solely to the Middle Woodland.

The Hopewell/Copena influence apparently is derived from the Tennessee River region of northern Alabama, and is manifested at such sites as Mandeville in Georgia (B.A. Smith 1975). At Mandeville, Mound B produced a Cartersville vessel in association with galena, clay platform pipes, flake knives, copper beads, a copper "pan pipe," and a clay figurine of a standing woman. At less spectacular Cartersville Focus locations circular house patterns, with interior and also extramural stone lined pit hearths have been identified (Garrow 1975:22). Kelly and Meier (1969) excavated a Cartersville site with from 20 to 25 house structures, which represented three different house types ranging in diameter from 7 to 20 ft (2.1 to 6.1 m); however, they reported no mounds from the site.

The excavations conducted to date on Cartersville Focus sites indicate that some type of economic shift away from a nut-based diet is also in progress. There are significantly fewer storage pits identified for Cartersville sites than for Deptford locations, and while Caldwell (1958:46) indicates no cultivated crops being present, Milanich (1971) does report corn from the Cartersville component at the Garfield Site, though the association is not considered firm by other investigators (Garrow 1975; Bowen 1980).

In addition to the Middle Woodland Cartersville series types, with their typical flat-based tetrapodal, deep bowls or beakers, Swift Creek Complicated Stamped bowls and globular short-necked vessels have been reported. Unlike the Cartersville bearing sites, those with predominantly Swift Creek ceramics are few, though present in the RBR area. Other data from nearby regions indicate a low incidence of Swift Creek sites in the Piedmont; for example, DePratter (n.d.) reports only eight Swift Creek sites from Wallace Reservoir. Wauchope reported no Swift Creek sherds from Rembert Mound (Wauchope 1966), and the position of Swift Creek in the project area remains unclear.

What is conspicuous by its absence from the area is any strong indication of Napier Complicated Stamped, the so-called transition type from the Woodland into the Mississippian Woodstock/Etowah types. It is unlikely that no Late Woodland manifestations exist within the RBR area, yet the absence of Napier or other contemporaneous types is peculiar. Taylor and Smith (1978) report no Late Woodland types, and recent work has not altered their conclusions (RBR Meeting, 15-17 December 1980). Both Cartersville and Connestee series materials have now been identified dating to the Hopewellian influx into the area during the Middle Woodland, and later series, all dating to the Mississippian, have been recognized. We do not see the absence or low incidence of Late Woodland types as indications of the abandonment of the RBRMRA. Rather, it would appear that Cartersville Focus may actually continue through the Late Woodland (Taylor and Smith 1978:331).

The Mississippian Period

In portions of the Southeast the appearance of Mississippian period traits heralds changes within internal village structures, presumably religious and ceremonial patterns, and the basic subsistence mode. The Mississippian cultural tradition begins to emerge in the central Mississippi River drainage region sometime after A.D.700 and its initial core area encompasses northeastern Arkansas, southern Illinois, southeastern Missouri, northwestern Mississippi, and western Tennessee.

The hallmark characteristics of the tradition included the presence of temple mounds organized around formal plazas, the dense packing of square to rectangular residential structures beyond the plazas, and the utilization of palisades to enclose the entire complex. The subsistence emphasis of the culture has shifted away from hunting/gathering/limited horticulture, the pattern present during the Woodland period, to a strong emphasis upon agriculture with a reduced dependence on hunting and gathering, though both activities were still conducted. The cultivation of maize, beans, squash, pumpkin, sunflowers, and gourds formed the staple portion of the diet, augmented especially in the winter and early spring months with hunting and gathering (Griffin 1964:248-249).

The degree of organization attested to by the construction of the temple mounds and palisades apparently is also reflected in the social ordering of the society. O'Brien (1972) suggests that the degree of craftsmanship exhibited by such products as ceramics, shell gorgets, and other items indicates the presence of full-time craft specialists within the society. Likewise Sears suggests (1964) that the elaborate ceremonies and rituals presumably associated with the temple mound complexes may have required the presence of a full-time priest class. This latter idea is significant in light of the Mississippian period Southeastern Ceremonial Complex, also called the Southern Cult, which many investigators (O'Brien 1972; Waring and Holder 1945) feel is the zenith of Mississippian period cultural development.

Prior to the emergence of the Southern Cult, the basic characteristics, as listed, of the Mississippian period were in place within the core area, and were slowly diffusing outward, primarily to the east and south. Major regional and subregional centers, possessing multiple mounds within large stockaded villages, developed within the core area and at such wide-spread localities as Spiro (Oklahoma); Moundville (Alabama); Etowah, Macon Plateau, and Mount Royal (Georgia); St. Johns II (Florida); and the Appalachian Summit area (Dickens 1978). While the populations within some of the centers appear to have approached 30,000 individuals (Dickson 1980), these large complexes are almost in a sense atypical of the overall Mississippian period occupations. The majority of Mississippian period sites are less spectacular, sometimes possessing only one mound, and at other times, none, and generally are more "Woodland" in configuration and cultural assemblages than the larger, more well

appointed Mississippian primary and secondary centers (Dickens 1978; Pearson 1978).

This latter point is even true following the emergence of the Southeastern Ceremonial Complex. The full range of Southern Cult traits, typified by the elaborate designs in both ceramic and shell of such forms as feathered serpents, dancing birdmen, speech scrolls, and skull and bone motifs (Sears 1950), are concentrated within the primary Mississippian centers like Spiro, Moundville, Etowah, and the Macon Plateau, but appear only infrequently outside of the major centers. In these outlying, or more specifically non-central, locations the basic ceramic motifs are less frequently anthropomorphic, and more generally involve geometric designs.

These Angular Stamped and Curvilinear Stamped traditions of ceramic design (Sears 1950:50) form part of the basis of distinguishing the various phases of the Mississippian period. For example, the RBR project area falls within both Sears' (1950:50) Area I, Curvilinear Stamped Tradition, and Area II, Angular Stamped Tradition, which would be confirmed by the presence of Etowah (Angular), Savannah I and II (Curvilinear) and Lamar Complicated Stamped ceramics (Angular, Curvilinear). As many of the Woodstock and Etowah motifs and designs are similar, including lined blocks, line-filled diamonds, and herringbone (Wauchope 1966:43), the lack of well-defined Woodstock elements in the region may partially be accounted for within defined Etowah ceramics.

For whatever reason, early Mississippian types are present and therefore the RBR area must be viewed as a region of blending of two complicated stamped traditions. Reported sites possessing the hallmark traits of the Mississippian period, platform mounds, however, are limited to three in Elbert County, Georgia: the Rembert Mounds (Wauchope 1966:371) - 9EB1; Tate's Mound and Village (Hutto 1970) - 9EB86; and Beaverdam Creek Mound and Village (Hutto 1970; Lee 1976; Rudolph 1980) - 9EB85. There had initially been a feeling among researchers in the area that more mound sites might once have been present, with the attrition rate of such sites directly attributable to the long-term agricultural use of the area. Phase I work to date has indicated that the majority of the Etowah and Savannah II sites appear to be representative of small support villages and indicate an increased population in the region during the Mississippian over that of the Woodland.

Although TRC (Gardner and Rappleye 1980) reports the consistent occurrence of late Mississippian Lamar series types from the floodplain sites within the RBRMRA, Phase I work on those sites has indicated a higher incidence of Savannah II types. As Savannah II, which lasts later than Etowah, possesses some of the same characteristics as Lamar, including burnishing and net-impressed types, in addition to a resurgent interest in check-stamping, the identification of components as either Lamar or Savannah II from small samples is difficult.

Of interest is that, where Lamar is identified there is no indication of either the Little Egypt or Barnett phases of the Lamar which have been identified further to the west by Hally (1970;1979). Both the Little Egypt (ca. A.D. 1375-1450) and Barnett phases (ca. A.D. 1450-1600), with their high incidences of the more westerly Dallas series shell-tempered wares are lacking from the project area, though there is some indication that varieties of Lamar Plain and Lamar Bold Incised may be present.

Indications are present, however, which suggest that Lamar sites in the RBRMRA are similar in ceramic assemblage characteristics to the Duvall phase defined by Marvin Smith (n.d.) for the Wallace Reservoir. Smith indicates that the Duvall phase (ca. A.D. 1375-1475) temporally encompasses the Little Egypt phase, but lacks the presence of Dallas series ceramics. The Duvall phase is marked by the presence of folded and punctated rim forms, the absence or low incidence of Lamar Bold Incised, and the dominance of sand/grit-tempered plainware. Complicated stamped ceramics in the collections are rare.

In conclusion, based on the incidence of Savannah II ceramics, it would seem that mature Mississippian occupations in the project area are better defined than are the preceding Late Woodland. However, though Lamar materials have been reported in the RBRMRA, their incidence is lower than expected if substantial Late Mississippian or Protohistoric occupations were present. There is no evidence to date to suggest that the project area was utilized intensively after about A.D. 1450 - 1500.

CHAPTER THREE

RESEARCH DESIGN

The research design developed for this project was primarily site-specific and based upon the data supplied by previous researchers. Since we have tried to provide a sense of continuity to the site descriptions by including a review of previous work in Chapter Five, we have also included in that section (preceding the methods and results of Phase I data recovery) a discussion of the research issues germane to each site in the Beaverdam Group.

This approach provides baseline data for interpreting each site individually. However, the combined results of the Phase I data recovery program at the Beaverdam Group may also advance our understanding of prehistoric exploitation of the RBRMRA. It is critical, therefore, that the site data be viewed in terms of a larger regional perspective. In this chapter, we briefly present a discussion of what we had expected to learn from the Beaverdam sites as a group.

The Beaverdam Group sites offer the potential for furthering our understanding of two concerns: 1) settlement preference and 2) community patterning. The question of settlement preference has, of course, been of increasing interest to prehistorians during the last decade (Gumerman 1971; Flannery 1976; Marcus 1974; Christenson 1980; Green 1980). Although the determination of factors influencing site location seems to be the subject of many survey level projects and underlies model formulation in sampling surveys, few excavation projects give sufficient attention to the availability of resources at a particular site. This is unfortunate because at the survey level so

little site specific information is obtained, while in intensive testing and data recovery, the large body of site data coupled with an intensive study of the paleoenvironment, geomorphic change, and resource availability provides the kind of information necessary to address questions of site spacing, status, and political and economic stimuli that cannot be addressed without excavation.

Once chronological components were defined at each of the Beaverdam Group sites, we were interested in asking the question of why the occupants decided to settle in each locale. The key to this question lies in the nature of the cultural (including material, structural, and subsistence) remains. What is required is a critical comparison of contemporaneous occupations within the Beaverdam Group to determine if the occupations represent the same site "types" (e.g., residential vs. specialized activity areas). If similar occupations are found among contemporaneous components, then the remainder of the cultural assemblage should reflect similar patterns of status, subsistence strategies, and site configuration.

These data may be viewed in terms of the location of each site with respect to surrounding environmental features to hypothesize on the settlement location preference for particular components of a settlement system within a specific chronological period. In order to understand landform change and stability and the effects of such upon prehistoric occupation, a geomorphologist was included in the study team. In addition, valuable data were obtained on hydrology and sedimentology. Although any conclusions regarding site location preference based upon the geomorphic and archaeological record are tentative, they serve as hypotheses suitable for testing by a larger complement of site data from the RBRMRA investigations.

The second research concern is that of community patterning and, at this point, we specifically point to the Mississippian period, which appears to be well represented at not only the Beaverdam Group, but other sites in the RBRMRA as well. In particular, we are interested in assessing the relationship, if any, of Mississippian occupations within the Beaverdam Group sites to the Beaverdam Creek Mound and Village (9EB85), located within three kilometers of all the Beaverdam Group sites.

We hypothesize that the Beaverdam Mound and Village was a socio-political center in the area around which a satellite settlement system was established. This is purely a suggestion based on the presence of Mississippian components identified by previous work. If correct, however, we may have an opportunity to explore the relationship between site spacing and settlement decisions. The Mississippian period has long been recognized as a period during which areas throughout the Southeast witnessed changes in settlement patterning accompanied by socio-political development. We do not, however, fully understand the multiple influencing factors which led to such significant shifts from Woodland standards, and which allowed for acceptance and/or institution of Mississippian patterns.

A point must be kept in mind when discussing the Mississippian period occupations in the RBRMRA. In addition to three Mississippian mound sites (9EB85, 9EB86, and 9EB1), there is a significant increase in the number of sites with identified Mississippian components over the preceding Late Woodland. Taylor and Smith (1978) identified 254 components during their survey of the project area; 9 (3.5 percent) dated to the Late Woodland, while 31 (12.2 percent) dated to the Mississippian. These data would substantiate a significant increase in the number of sites, if not imply a concomitant increase in population as well.

The increase in the number of Mississippian sites may be a function of the basic change in settlement pattern which has been suggested for the Mississippian period. If one accepts a hierarchy of Mississippian site types (Pearson 1978; Hudson 1976) then it is possible to postulate that by Mississippian times a dispersed settlement pattern primarily composed of horticulturally-supported hamlets was in operation in the RBRMRA. The hamlets, represented by sites such as those in the Beaverdam Group, in turn supported the activities, if not the population, present at the mound sites such as 9EB85.

CHAPTER FOUR

FIELD AND LABORATORY PROCEDURES

Field Methods-Archaeology

Fieldwork at the Beaverdam Group was initiated by NWR with a controlled surface collection. A systematic linear transect survey was conducted to locate areas of high artifact density and to assess horizontal site extent.

This survey was undertaken at all sites except 9EB208. At that site county soil removal operations were threatening immediate destruction of cultural remains. Consequently, our work focused on the area of disturbance where removal procedures had already stripped the plowzone. At 9EB207, the survey was confined to the western half of the site where TRC had noted significant surface artifact concentrations.

At 9EB92, 9EB207 and 9EB219, the survey was carried out by walking a series of transects, spaced 15 m apart, across the site as defined by the TRC maps. Collections were made at systematic 10 m intervals along each of these transects by laying a one meter square of PVC pipe on the ground and collecting all artifacts within the square. For data management purposes, the survey area was divided into 30 m by 30 m units, each comprised of nine collection stations. Upon completion of a unit, all materials were returned to the supervisor who recorded the class and quantity of artifacts from each station on a collection sheet. The artifacts were then bagged by unit provenience to be returned to the field laboratory with the appropriate collection sheet.

In areas where the vegetation precluded surface collections (such as the wooded area at 9EB219) shovel tests measuring 30 cm by 30 cm were placed at systematic 10 m intervals. The fill from the shovel pits was carefully handsorted, and any materials recovered were bagged in the same way as described above. Using either the surface or shovel pitting procedure, each transect was continued until three consecutive collection stations yielded zero artifacts. After completion of all transects, the survey data were plotted on graph paper in order to delineate horizontal site extent and artifact concentrations.

Following the survey, fieldwork focused on testing and Phase I data recovery at each of the sites in the Beaverdam Group. Two principal techniques were employed, depending upon the stratigraphic information derived from previous archaeological work (Gardner and Barse 1980; Taylor and Smith 1978). Where in situ midden deposits were not present and cultural materials lay in the plowzone, mechanical stripping was undertaken in those areas of high artifact density defined on either previous work or observations made by NWR. The procedure was conducted in order to expose intact features such as postmolds, hearths, or storage pits that intruded into the underlying B horizon and were undisturbed by the plow.

Although stratigraphic information was available from the previous work at these sites, a 50 cm square test unit was excavated (except at Area A/B at 9EB92, where a backhoe cut had been made) in the vicinity of each area to be stripped in order to confirm the depth of the plowzone and the absence of cultural strata. A front-end loader was then used to remove the plowzone. The stripping operations were followed by shovel skimming and troweling to expose features. In some cases, the B horizon soils were so dry and compacted that a sprinkling system had to be utilized to soften the surface. As mentioned, landfill operations at 9EB208 had already removed the plowzone prior to our work at the site so only shovel skimming and troweling were conducted in three discrete areas defined by possible features, and revealed during the soil removal.

The second investigative technique was standard excavation, undertaken at 9EB219 and the eastern portion of 9EB207. At both of these sites, buried cultural strata were previously identified (Gardner and Barse 1980). Excavation followed either a 1 m by 1 m or 2 m by 2 m format, except when placed adjacent to backhoe cuts. Both arbitrary and stratigraphic techniques were employed in excavation, the latter if discrete breaks could be discerned between strata. Backhoe trenches were placed at all sites except 9EB208, in order to define site stratigraphy and to aid in the definition of deeply buried deposits.

At all sites, excavation of features and postmolds followed a similar procedure. If postmolds were large enough (approximately 30 cm), cross-sections were cut to provide stratigraphic data. If the postmolds were not of sufficient size to permit this technique, they were excavated as a single unit and stratigraphic data recorded after

excavation. All features were sectioned, profiles drawn and then the remainder excavated.

Three basic recovery techniques, dry screening, water screening, and flotation, were employed during fieldwork. Dry screening was used only in cases where it was either impossible or inefficient to use a water screening system. In the case of both these recovery techniques, the fill from each excavation level was screened through 1/4 in hardware mesh. A 15 cm square control block was left in each standard excavation unit and taken out by level at the completion of excavation. Each control block was water screened through 1/16 in hardware mesh.

Flotation samples (about two liters) were obtained from all cultural strata. In addition, the fill from all cultural features or postmolds was taken in toto for flotation. The flotation apparatus consisted of a 50 gal drum with circulating water. Material that floated to the top was skimmed and then sorted to recover any seeds, bones, or charcoal. The remaining heavier material was then waterscreened to recover other artifacts.

Following the completion of excavation, pollen and soil samples were taken from each natural stratum identified in the profile. In cases where a stratum was wider than 20 cm, samples were taken at 10 cm intervals. Where charcoal was encountered it was collected for possible C-14 analysis.¹

Photographs were made prior to, during, and after excavation at each site. The south and west profiles of each excavation unit were photographed and drawn prior to taking any soil or pollen samples. Photographs and drawings were made of all cultural features encountered in excavation.

Field Methodology-Geology

Available archaeogeologic information for individual sites has been briefly summarized by Gardner and Barse (1980), and plans for the project included field visits from the TRC geomorphologist and pedologist. However, it was found desirable to have more detailed information for the sites of the Beaverdam Group. Consequently, a geomorphic and stratigraphic reconnaissance was conducted during the testing and data recovery phases.

The four sites were visited and described by NWR geologist, John P. Lenzer. Following that, a backhoe was used to dig stratigraphic

¹ We note that in no case was the quantity of charcoal found to be adequate for radiocarbon analysis during this phase of work.

trenches at sites 9EB219, 9EB207, and 9EB92 (the three sites on relict alluvial terraces). Locations for trenches at each site were selected by the geomorphologist to give information about 1) the internal stratification of the terrace deposits; and 2) the presence of any human occupation levels deeper than the sterile horizons which the archaeological test pits reached. Geologic sections were recorded for each trench (stratification, materials of the deposits, Munsell colors, etc.), and a field estimate was made of horizon correlation between trenches and terrace structures.

Laboratory Methods

All specimens and samples recovered in the field were assigned permanent field bag numbers from a sequential list of numbers used for the duration of the project. A modified University of South Carolina, Institute of Archeology and Anthropology accession and cataloguing system was employed to be consistent with other RBRMRA investigations. A detailed explanation of this system is on file with IAS and the Institute.

Historic materials were found at the sites; however, all were of very recent origin and none represented significant historic activity. The majority of the historic items were expended shotgun shells and discarded cans.

Lithic Analysis

The majority of artifacts recovered from the Beaverdam Group sites consists of lithic material, most of which is crudely worked. Lithic analysis proceeded on the basis of two criteria: 1) identification of the lithic raw material; and 2) the identification of artifact categories based on morphological and functional traits.

Geological Categories

Prior to the establishment of lithic categories based on the morphological and functional attributes of individual artifacts, it was essential to segregate the lithic material into potentially significant raw material groupings. Seven categories were originally established in consultation with our consulting geomorphologist (Lenzer): quartz, quartzite, chert, fine grained basic igneous rock, fine grained granitic rock, gneissic rock, and soapstone. During subsequent review, it was pointed out that the use of quartzite for tool manufacture is without precedent in the RBRMRA, though kyanite quartzite is found at Graves Mountain, in Lincoln County, Georgia (Hartley 1976). Therefore, the categories of quartz and quartzite have been collapsed.

The underlying assumption of the categorization was that by noting the raw material of each artifact, it would be possible to determine

which groups of artifacts were fashioned from locally available lithic materials and which were fashioned from non-local materials. Quartz, meta-igneous rock and soapstone could be found within 10 km of the Beaverdam Group, whereas other lithic materials, such as cherts, would have to be brought to the site areas. It was recognized that local Piedmont cherts are available in the RBRMRA, however Taylor and Smith (1978:232-233) indicated that the majority of chert identified as to source during their survey was Coastal Plain chert, probably from sources outside of the RBRMRA. Therefore, chert was considered potentially exotic, though further differentiation was not made.

Because the segregation of lithic materials into these informal geologic categories is not without ambiguity, it is essential that the macroscopic traits of each geologic category used in the identification of raw materials be examined here.

Quartz - Chert: Quartz is by far the most common lithic material recovered from the project area. While the finest quality quartz resembles chert in conchoidal properties and often color, the majority of the quartz is clear or milky white, vitreous, with a Moh's scale of hardness of approximately seven, and no evidence of internal crystal boundaries. Many quartz artifacts in fact appear to have been worked from a single crystal. Even though boundaries of individual crystals will not be evident in quartz artifacts, many of the quartz artifacts will be marred by fractures resulting perhaps from the initial modification of the artifact or subsequent use.

As noted, though, fine quality quartz can resemble chert. Because of this potential ambiguity, a distinction was maintained between chert and quartz on the basis of surface texture: quartz flakes were identified by a glassy surface; and chert flakes by a matte surface. Otherwise, chert was characterized by a smooth surface without discernable crystalline structure. Any differentiation between types of chert was not maintained in this work due to the small amount of chert material recovered.

Fine Grained Basic Igneous-Fine Grained Granitic and Undetermined Rock: Aside from quartz, the igneous rock recovered from the Beaverdam Group usually consisted of debris and was divided into two broad groups based largely on color. Lighter colored fine grained rock with detectable quartz crystals was designated "fine grained granitic," whereas darker colored rock was designated "fine grained basic igneous."

Fine grained basic igneous rock was generally dark green to almost black, with the individual grain clearly visible macroscopically. Fine grained basic igneous rock almost always consisted of debris, and was rarely used in the manufacture of artifacts. Lighter colored fine grained granitic rock, often represented by debris, was also used for crude flakes usually characterized by a very thick patina.

Similar to these crude flakes in color were flakes made from undetermined lithic material. This undetermined lithic material has been arbitrarily placed in the category "fine grained granitic," most of which appears to have been fashioned into flakes. It exhibits the following characteristics: discernable fine-grained crystalline structure that resembles coarse novaculite; isolated veins of other materials, usually quartzite. Some of this undetermined rock could be rhyolite, or what Taylor and Smith called Carolina slate or argillite (Taylor and Smith 1978:232).

Gneiss: This rather dark-colored metamorphic rock, which usually consisted of unmodified debris in the project area, was differentiated from fine grained igneous rock by the presence of banded lighter and darker minerals. When different colored minerals tended to be present at random, the rock was called fine grained igneous.

Soapstone: The remaining broad category of metamorphic rock consisted of soapstone. In general, soapstone could be differentiated from the other lithic materials recovered due to its greenish color, relatively platy surface, and relative softness; most soapstone specimens could be abraded in the process of cleaning with a toothbrush. Within this category we made an initial attempt at distinguishing macroscopically subcategories such as talc schist, chlorite schist and undifferentiated schist on the basis of relative hardness and color. We do not feel, however, that the criteria were sufficiently tight to be assured of less than a five percent error. Further, we began to observe that the relative frequencies of each subcategory were approximately equal so there did not appear to be dramatic differences in the use of these materials from site to site. As a consequence, all subcategories were subsumed under the category soapstone to avoid assumptions based on judgmental error.

After the lithics were segregated into the geologic categories, artifacts from each raw material grouping were divided into significant morphological and functional groupings. As a result, all lithic artifacts recovered were divided into the following broad categories whenever possible: flakes, unifacial tools, bifacial tools, cores, hammerstones, groundstones, and lithic debris. These broad categories and any problems resulting from the identification of artifacts within these categories, are presented below.

Archaeological Categories

Flakes: The quartz, chert, fine grained granitic, and undetermined flakes recovered from the Beaverdam Group, were segregated into groups on the basis of completeness of specimen, edge modification, and degree of cortex on the dorsal side.

Completeness of specimen was dichotomized into whole and fragmentary flakes. Whole flakes were complete or very nearly so. All salient flake attributes were present, such as the bulb of percussion, a definite ventral and dorsal side, and the original edges. Allowances

were made for missing striking platforms and extreme distal portions of the flake. Flake fragments consisted of just the bulbar or proximal portion of the flake, or just the distal portion; however, these flake fragments still retained enough of the original edges to determine the presence or absence of edge modification.

The identification of edge modification on both whole and fragmentary flakes was rather subjective. However, edge modification, which is considered here as either discernable use marks or retouch, was characterized by a series of continuous nicks on one or more flake edges. Isolated nicks, though possibly the result of use, could equally be the result of subsequent accidental modification (shovel, cow, tractor). Such nicks were not considered edge modification.

The presence or absence of cortex on the dorsal side of a flake is significant in the identification of various stages of lithic reduction, especially of chert nodules. Even though most of the flakes recovered from the Beaverdam Group were of quartz, and thus without cortex, this distinction was maintained after presence or absence of discernable original surfaces was included with cortex. The degree of cortex on the dorsal side determined the designation of three groups of flakes: primary, secondary, and tertiary. Primary flakes were those with more than 50 percent of the dorsal surface covered by cortex on a discernable original surface. Secondary flakes had cortex or original surface covering between 10 and 50 percent of the dorsal surface. Tertiary flakes had less than 10 percent of cortex or original surface on the dorsal side.

Unifacial Tools (Figure 5): Unifacial tools are artifacts resulting from a single removal that have been subsequently modified. They still retain definite ventral and dorsal sides. Unifacial tools are distinguished from modified flakes due to a definite and replicable tool form, or due to the presence of a specific work area not common on a flake (e.g., flake graver).

Bifacial Tools (Figure 6): Bifacial tools are artifacts with worked or retouched surfaces, modified to the degree that neither the dorsal or ventral side is apparent. Artifacts meeting this criterion were segregated according to morphological and functional attributes that are generally apparent in the name of the individual artifact groups established under bifacial tools. There were, however, some bifacial tool categories without clear definitions, and these will be discussed in the following two paragraphs.

Knives and the distal end fragments of projectile points form a continuum of what appear to be bifacial blades. The distinction between knives and knife fragments, and distal fragments of projectile points was based on symmetry and point type. Artifacts considered too asymmetrical for a projectile point, and having a rounded rather than a pointed tip, were considered knives.

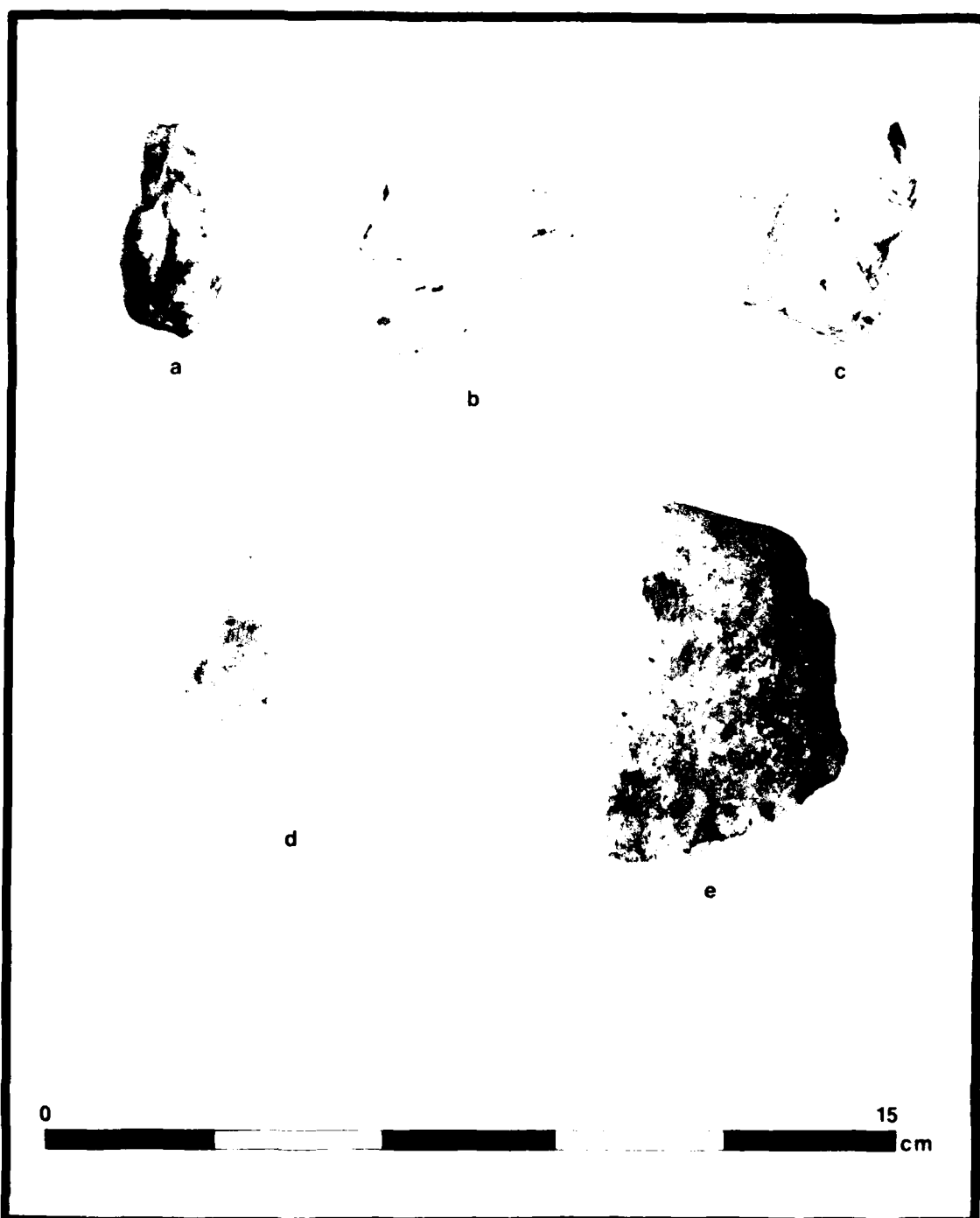


FIGURE 5. UNIFACIAL TOOLS. a. drill (9EB92); b. awl (9EB208); c. spokeshave (9EB92); d. flake graver (9EB207); e. backed scraper (9EB219).

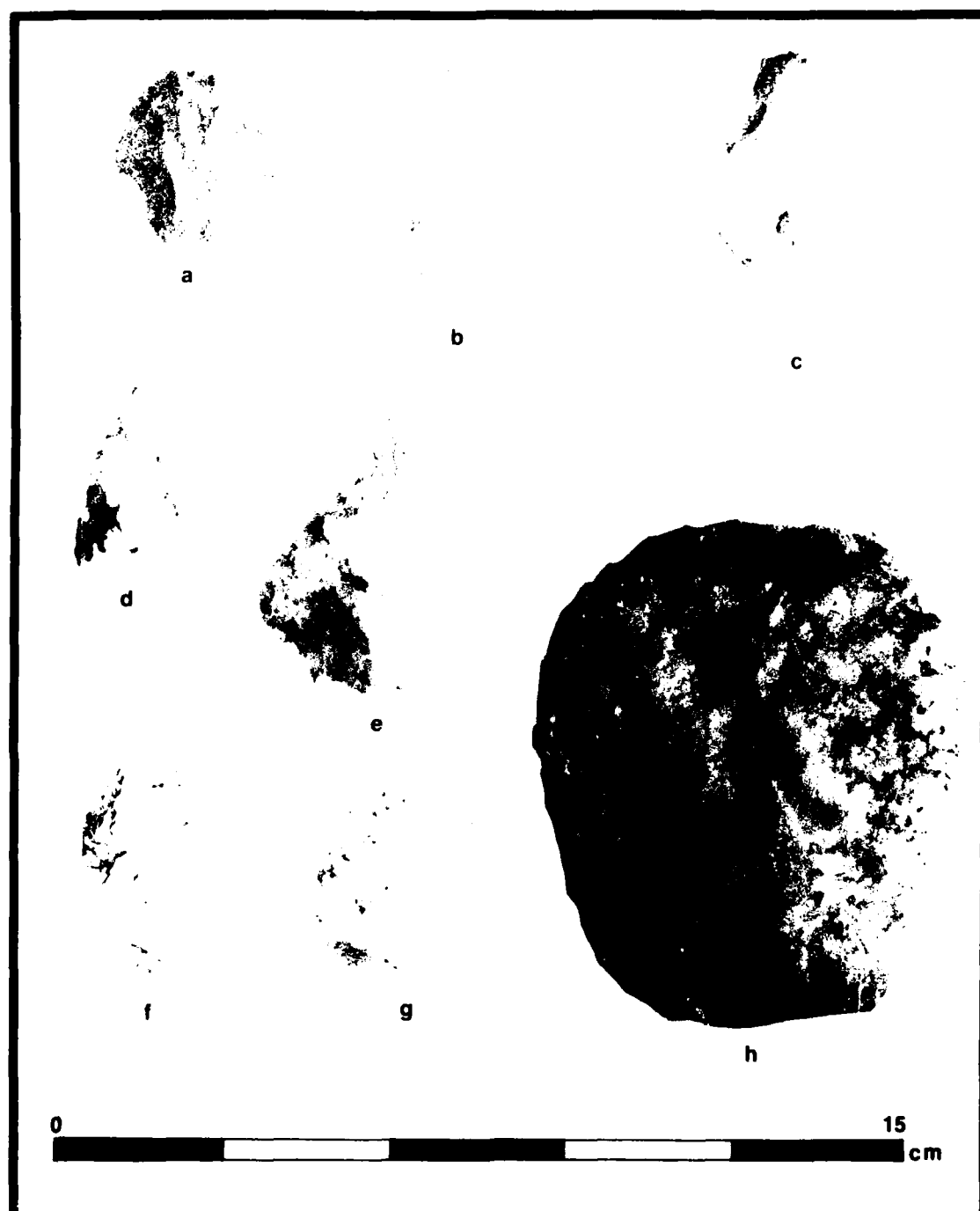


FIGURE 6. BIFACIAL TOOLS. a. hafted end-scraper (9EB219); b,c. drills (9EB92); d,e. punch/awls (9EB219); f,g. discoidal bifaces (9EB219); h. backed scraper (9EB208).

Other bifacial artifact groups whose definitions cannot be assumed are backed scrapers and choppers. A backed scraper is an oval to rectangular biface with one edge of primary use or retouch. Opposite this modified edge is a relatively thick back consisting usually of the original surface or the cortex. This back allows greater ease in handling. Backed scrapers are relatively common at the Beaverdam Group, and are usually fashioned out of quartz. Choppers were not so common and were usually rather crude. Because it was often difficult to distinguish these artifacts from hammerstones, choppers were considered any artifact in which battering was localized to one or two prominent areas.

Projectile points were also included under bifacial tools. They are discussed here in some detail because of their importance as diagnostic temporal markers. A total of 134 projectile points and projectile point fragments were recovered from survey and excavation at the Beaverdam Group. More than half of this total were recovered from 9EB219. Of the 134 projectile points and fragments, 46 were identifiable, with over half of these recovered from 9EB219. Whenever possible, projectile points were identified according to standard typologies used in the Piedmont of Georgia and the Carolinas. Eleven different types of projectile points were identified in the course of lithic analysis.

The majority of projectile points and projectile point fragments recovered from the Beaverdam Group were of quartz. Only among the Late Archaic Savannah River Points was another material, fine grained granitic, more common.

Cores: Cores are quartz or chert artifacts with either a definite, prepared striking platform or artifacts exhibiting more than one large flake scar, indicating purposeful removals. Due to the extremely crude and amorphous nature of most of the cores recovered from the Beaverdam Group, they have not been subdivided into smaller units.

Hammerstones: Hammerstones are those quartz artifacts marked by evidence of pounding over large areas of each specimen. Flake removals may or may not have been effected prior to use as a hammerstone. Morphologically, most specimens were usually rounded.

Groundstone (Figure 7): Groundstone consisted of all lithic material exhibiting evidence of abrasion. The salient examples of groundstone artifacts consist of soapstone vessel fragments and "net-sinkers," as well as miscellaneous abraded fragments of soapstone and other lithic materials.

Debris: All lithic material that could not be subsumed under one of the above categories was considered debris. This category encompassed extraneous material resulting from lithic modification and unmodified lithic material not native to the project area and thus probably imported by indigenous peoples. The two types of debris were distinguished in the following manner. Debris within the geologic

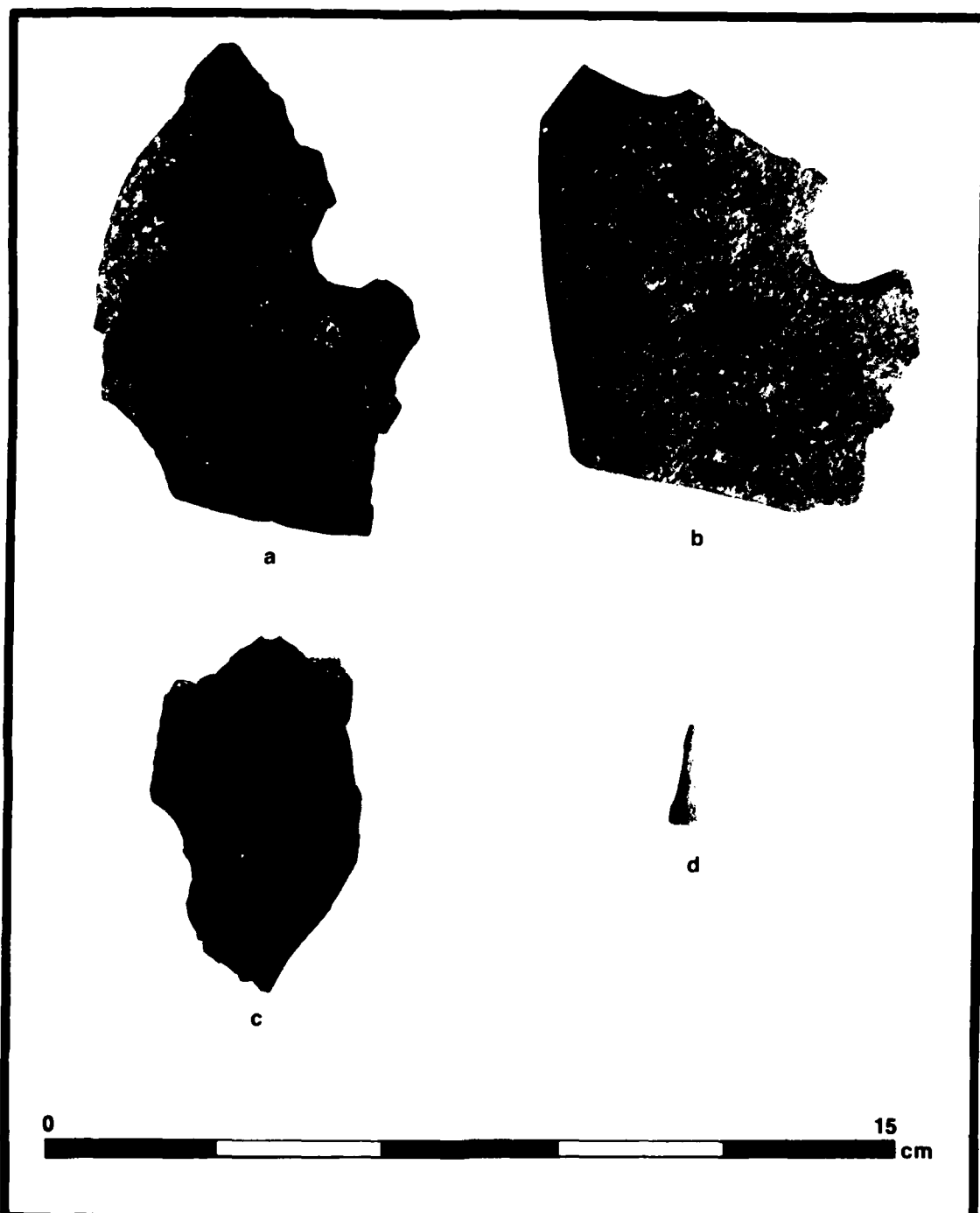


FIGURE 7. GROUNDSTONE. a. "netsinker" (9EB219); b,c. "netsinkers" (9EB207); d. plug (9EB219).

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categories "fine grained basic igneous," "fine grained granitic," "gneissic rock," and the three soapstone categories, consisted of raw material of dubious, if any, human modification.

Debris within the quartz and chert categories was modified to the degree of at least having facets created intentionally by man. This latter category consisted of modified material too small and fragmentary to type, or small flake fragments wholly lacking their original edges. It is possible that some of the larger quartz debris specimens could have been cores; however, it is often impossible to ascertain due to the crude flaking tendencies of quartz.

Discussion

The lithics recovered from the Beaverdam Group sites (7277 items) were examined at several levels to address the possibility of inter-site variability. At the most general level, the assemblages from each site were combined to create a basic data profile. Each site was then compared to the data profile to determine how it varied relative to that profile and to each of the other sites in the group. Any variances were subsequently evaluated by the few components at the sites which could be isolated chronologically. These data and comparisons formed the basis upon which limited conclusions of cultural-specific patterns of lithic technology were formed.

Generally, the lithic assemblage of the combined Beaverdam Group sites is characterized as predominantly flakes and debris from tool manufacture. As a whole the collection is composed of 5.5 percent tools (402 items) and 94.5 percent (6875 items) cores, flakes, and debris. While the majority of items are quartz (Table 1), other stone types used included chert, fine grained granitic, fine grained basic igneous, other, and soapstone.

TABLE 1. STONE TYPE COMPOSITION COMPARISON BETWEEN TOOLS AND FLAKES OF THE BEAVERDAM GROUP ASSEMBLAGES.

Stone Type	Percentage of Categories		
	Flakes	Tools	Total
Quartz	72.06	80.40	72.56
Chert	3.00	2.46	2.97
Fine grained basic igneous	2.57	0.74	2.46
Fine grained granitic	6.34	11.08	6.63
Gneissic	0.32	0.25	0.31
Soapstone	15.67	4.68	15.00
Shale	0.02	0.00	0.02
Unidentified	0.00	0.49	0.03
Other	0.02	0.00	0.02
Total	100.00	100.00	100.00

Within the general assemblage there is disparity between the percentages of stone material types represented by either flakes or tools. For example, 2.57 percent of the flakes recovered are fine grained igneous, while only 0.74 percent of the tools are of the same material. Likewise, soapstone accounts for 15.67 percent of the flakes, but only 4.68 percent of the tools. These disparities are likely attributable to one of three possibilities: 1) differences in the amount of debris created in manufacturing certain tools; 2) shifts in use of specific stone materials for functional reasons; and 3) importation of certain tools which were manufactured elsewhere.

The different physical characteristics of each of the stone types affect the fracturing potential of the material. The most important factor in the utilization of a specific stone material is the size of the crystals within the stone matrix (Crabtree 1967:8). Generally, the larger the crystal size, the more irregular, less predictable, and harder to induce the fracturing will be. These variables will strongly influence or limit the options for knapping techniques which are available to the knapper. Other variables such as form and size of the stone materials or the tool to be manufactured determine the reduction pattern and strategy used by the knapper. Thus, the manufacturing of tools from different stone types may require different techniques and strategies which may produce differential amounts of debris (Henry et al. 1976).

While the physical characteristics of the stone type determine the knapping technique utilized, these characteristics also dictate a selection on the part of the manufacturer for specific stone types. For example, a coarse grained stone is generally more resistant to fracturing so it is functionally more desirable for use as a chopping/hammering tool than is a more brittle fine grained chert (Toll 1978:64). This same resistance to fracturing would prohibit use of some stone types where fine and detailed flaking is needed.

The third possibility may involve the importation of finished tools to a site, which would cause a disparate percentage between flaking by-products of a particular material and the finished tools of the same material. This particular possibility is most apt to occur with stone types which are highly desirable because of superior qualities such as ease of flaking or large size, or because the lithic processing sequence is spread over several loci or sites.

A second pattern was also identified in the general assemblage, and this concerned the preference for bifacial tool manufacture over unifacial tool production. About 67 percent of the tools identified were of bifacial types, including projectile points, while less than 30 percent were unifacial. Of the number of bifacial tools, 55.1 percent were projectile points or fragments. Again, technofunctional considerations may explain the disparity between the occurrence of various tool types.

This basic profile of the total assemblage when compared against each site resulted in a clearer picture of the differences between the site-specific assemblages. The percentage of flakes and debris is greatest at 9EB219 and lowest at 9EB92. As expected, the percentage of tools is inverse to the percentage of flakes (Table 2); it is, however, of note that 9EB219 exhibited the lowest percentage of tools for any site in the group, which was unexpected because of the supposed reliance of Late Archaic peoples upon hunting/gathering strategies. The disparate percentages at 9EB219 could be accounted for by one of the later components represented at the site (see Chapter Five).

TABLE 2. LITHIC ASSEMBLAGE PERCENTAGE BREAKDOWN OF SELECT ASSEMBLAGE CLASSES.

	<u>9EB92</u>		<u>9EB207</u>		<u>9EB208</u>		<u>9EB219</u>	
	#	%	#	%	#	%	#	%
<u>Flakes</u>								
unmodified	370	48.2%	111	43.4%	504	61.3%	2573	48.5%
modified	31	4.0%	7	2.7%	11	1.3%	74	1.4%
<u>Cores</u>	21	2.7%	4	1.6%	6	.7%	33	.6%
<u>Debris</u>	203	26.5%	108	42.2%	252	30.7%	2426	45.7%
<u>Hammerstones</u>	1	.1%	---	-----	3	.4%	11	.2%
<u>Tools*</u>	141	18.4%	26	10.2%	46	5.6%	189	3.6%
TOTALS	767	100%	256	100%	822	100%	5306	100%

* includes both chipped stone and groundstone.

With regard to the use of stone material types, the use of specific stone for the manufacture of tools and flakes was relatively consistent between each of the sites. The most obvious departure came in the use of soapstone; 17.5 percent of the collection at 9EB219 was of that material while at the other three sites, the percentage never was greater than 7.5 percent.

It is recognized, of course, that soapstone use may continue through much of the cultural sequence in the RBRMRA; however, many researchers assign its most prevalent use to the Late Archaic

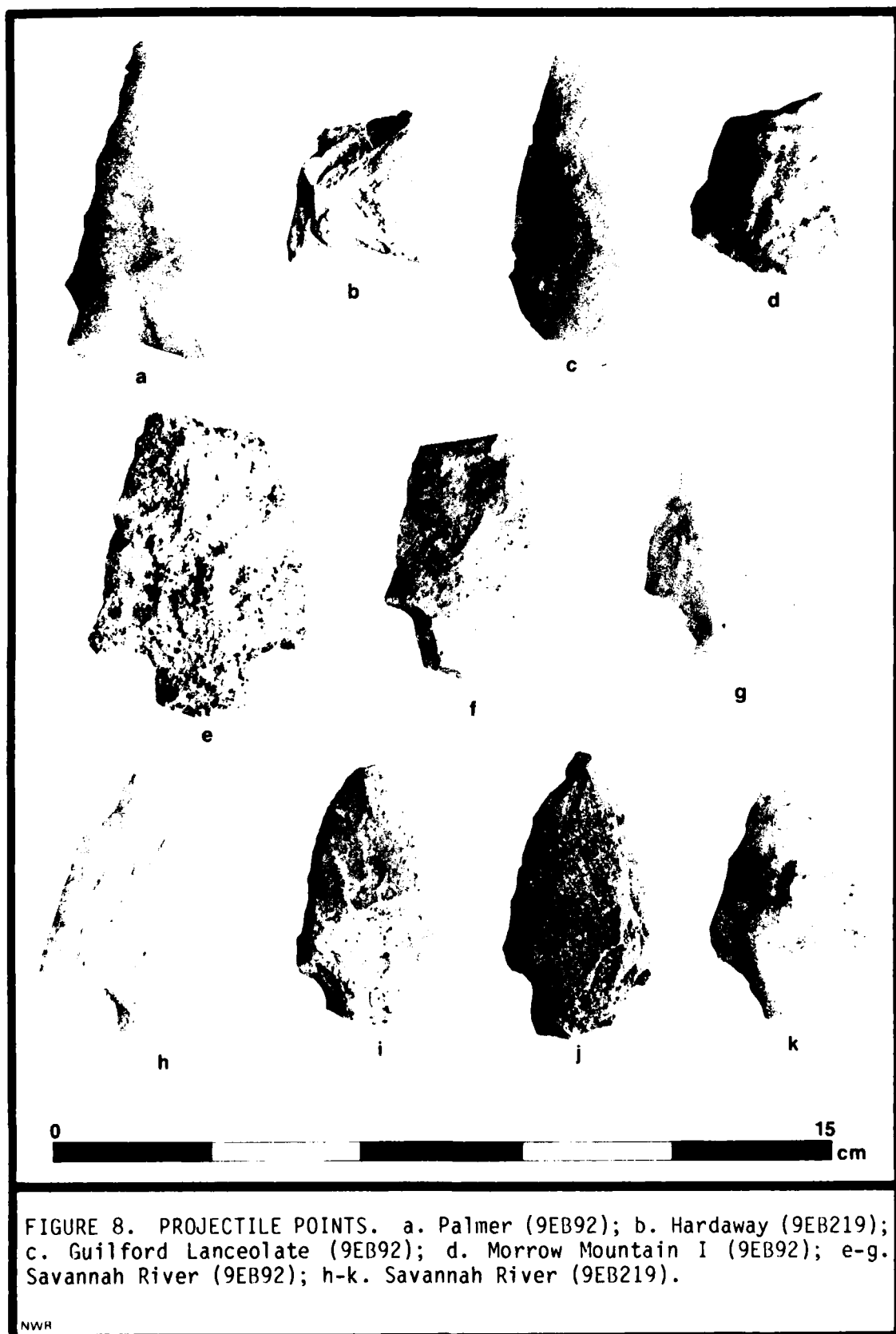
Stallings period. As 9EB219 has the only defined Stallings occupation of the four Beaverdam Group sites, the significant increase in soapstone use at that site may be related to the Stallings occupation.

A third point is of interest when viewing the overall and site-specific assemblages. As presented on Table 2, 18.4 percent of the assemblage at 9EB92 are tools, and of the total tools represented, 141, bifaces form 89.4 percent of the recognized items. Initially this could be considered surprising, in light of the fact that the most well-defined occupations at that site appear to date to the Mississippian period. Yet, upon a closer examination of previous research (Taylor and Smith 1978; Gardner and Barse 1980; Hutto 1970) and in an examination of the identifiable projectile points recovered during the Phase I work at the site (Table 3; Figures 8 and 9), it is apparent that Archaic and Woodland occupations at the site are present and may at least partially account for the relatively high occurrence of bifaces to other tool types represented at the site.

TABLE 3. DISTRIBUTIONS OF IDENTIFIED PROJECTILE POINTS AND BIFACES

POINT TYPE	CULTURAL PERIOD	SITES			
		9EB92	9EB207	9EB208	9EB219
Palmer	Early Archaic	1			
Hardaway	Early Archaic				1
Morrow Mountain I	Middle Archaic	2		1	4
Guilford Lanceolate	Middle Archaic	1			
Savannah River	Late Archaic/ Early Woodland	4			8
Yadkin	Early Middle Woodland				2
Stemmed triangulars and shield shaped, medium small*	Archaic - Early Woodland	2		1	4
Leaf shaped, narrow and medium*	Archaic - Mississippian	1	1		1
Quartz crude stemmed*	Archaic- Mississippian	3			1
Small Triangular	Mississippian	1			7
Total Bifaces		126	22	44	164
TOTAL - BIFACIAL TOOLS		141	23	46	192

* point types from (Wauchope 1966)



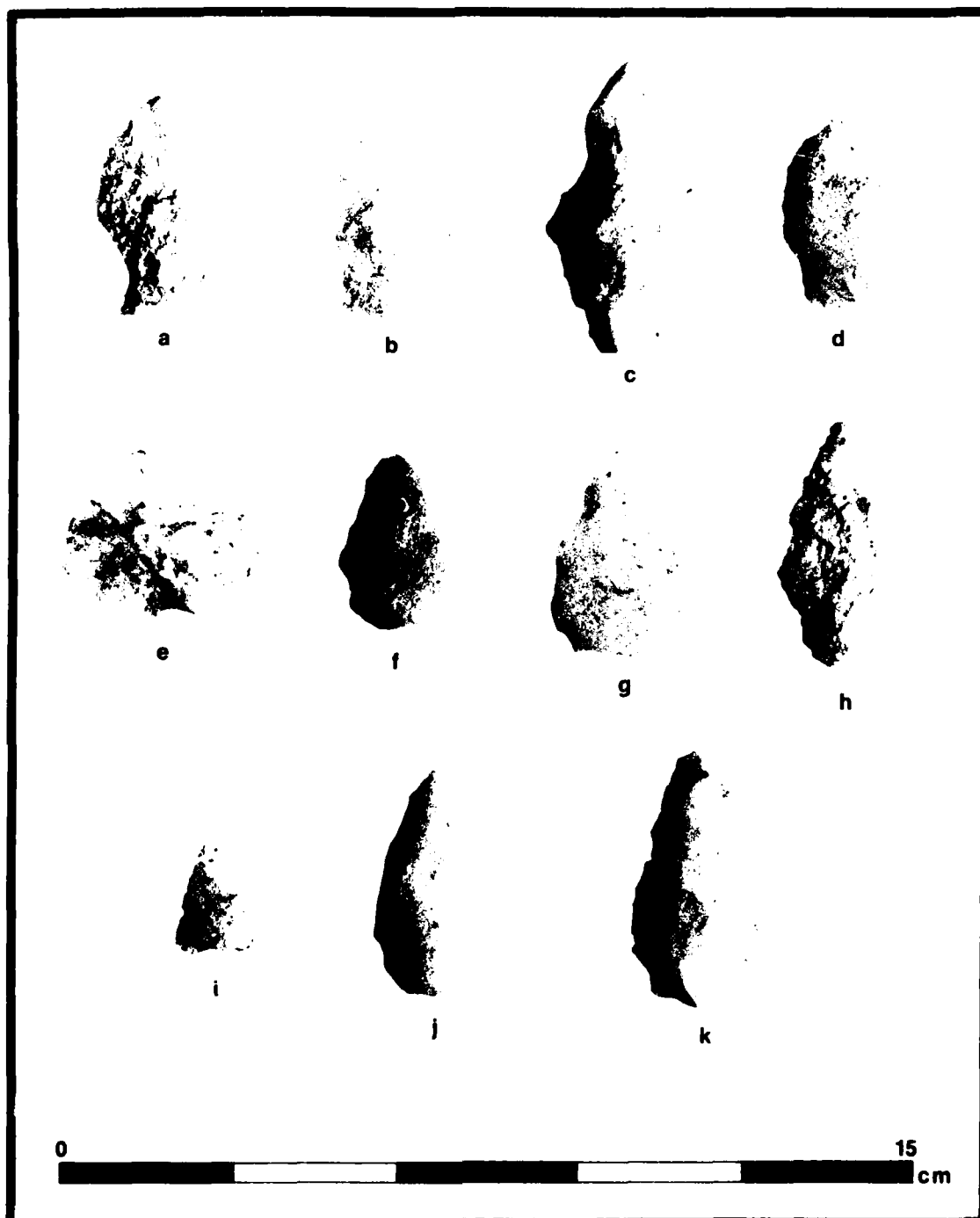


FIGURE 9. PROJECTILE POINTS. a. resharpened Savannah River (9EB219); b,c. quartz crude-stemmed (9EB92); d. quartz crude-stemmed (9EB219); e,h. stemmed triangular and shield-shaped, medium small (e, 9EB219; f, 9EB92; g,h, 9EB219); i. small triangular (9EB219); j,k. leaf-shaped, narrow and medium (j, 9EB92; k, 9EB219).

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The trends just summarized indicate only limited intersite variability in types of stone materials used and types of tools made. It would appear that the lithic assemblage as a whole indicates that tool manufacture was conducted at each of the sites. The high percentages of flakes identified in each collection (Table 1) support the thesis of on-site lithic reduction. The obvious differences in the percentage of tools represented within each collection (Table 1) cannot be fully evaluated because of the lack of pure components at the sites.

Ceramic Analysis

Although Taylor and Smith (1978) indicated a paucity of ceramics in the RBRMRA, it had been anticipated that village or hamlet sites would produce, upon excavation, sufficient materials to allow for both design element and paste and temper analyses. However, a total of only 2516 sherds were recovered from the four sites in the Beaverdam Group. Of the ceramic total, 1021 sherds were less than five centimeters in width, and were classed as crumbs. Crumbs were not subjected to further analysis and none were considered in percentage calculations. The low numbers of sherds restricted the types of analyses that could be implemented with the collection, either on a site by site level, or by viewing the collection as a whole.

The analysis of the ceramics proceeded in three stages. All ceramics were initially sorted into plain, decorated or crumb classes. Within the plain and decorated classes further subdivision was made during the initial sorting, creating subclasses of plain rim, plain body, plain base, plain other, decorated rim, decorated body, and decorated other. Into the "plain other" and "decorated other" categories were placed such items as lug handles, worked sherds, and daub. All items were counted and catalogued.

The first stage of analysis involved an attempt to quantify the differing decorative motifs and elements identified in order to determine not only their typological affiliation but if certain design elements or motifs were preferred on intrasite and intersite levels. The limited number and small size of decorated sherds obviated the success of such an analysis; however, it was possible to place approximately 45 percent of the decorated sherds within previously described types. The principal sources used during the typing of the sherds were Wauchope (1966), Hally (1970; 1979), Anderson et al. (1979), and Waring (Williams 1968). These and other more general sources were fully examined prior to the initiation of the typing. New World Research (Campbell et al. 1981) had completed a major survey in the Augusta area earlier in 1980, and a representative type collection of ceramics identified from that survey were also used for comparison of stylistic elements. Examples of the various types are illustrated in Figure 10.

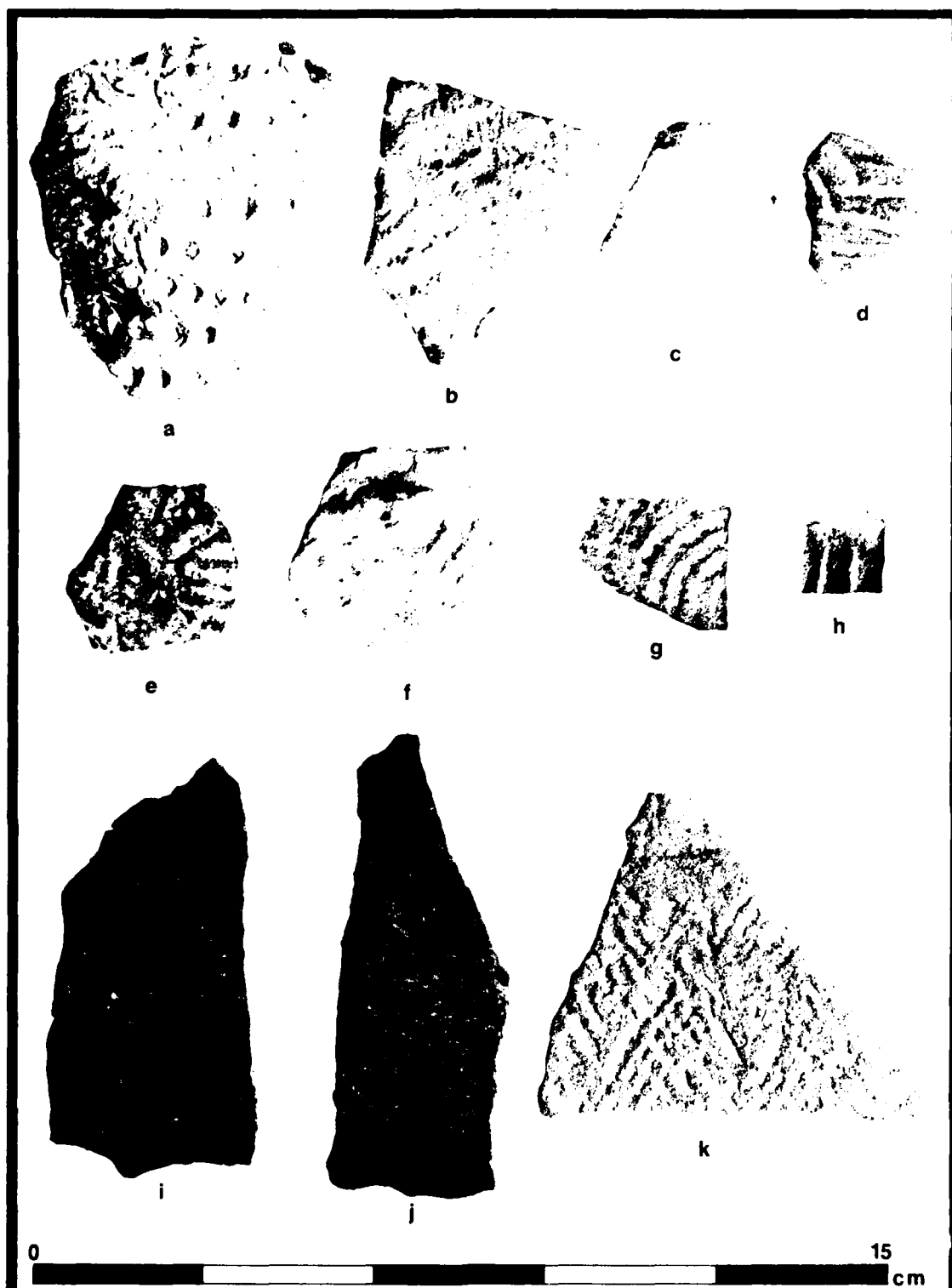


FIGURE 10. CERAMICS. a. Stallings Punctate (9EB219); b,c. Dunlap Fabric Impressed (9EB219); d. Lamar Bold Incised (9EB92); e. Etowah Complicated Stamped, radiated spoke (9EB219); f. Savannah Complicated Stamped, with node (9EB219); g. Savannah Complicated Stamped; h. Incised rim (9EB219); i,j. Savannah Net Impressed (9EB208); k. Savannah Check Stamped, overstamped (9EB207).

The decorated ceramics identified during the course of analysis include Stallings Plain and Punctate, Dunlap Fabric Impressed, check and simple stamped sand-tempered types which most closely conform to the Deptford Check Stamped and Simple Stamped type descriptions (Wauchope 1966), Etowah and Savannah Complicated Stamped, Woodstock-like Complicated Stamped, and Lamar Bold Incised. The occurrence of these ceramic types would indicate occupations dating to the Late Archaic Savannah River Formative, Early Woodland, Late Woodland, and Mississippian.

The second part of the ceramic analysis involved an examination of the paste and temper characteristics of the collection. A random sample of 25 plain and decorated sherds were examined under magnification for their characteristics, and five provisional paste/temper categories were established. Two objectives underlay the establishment of the paste and temper categories: 1) to determine if different tempering agents had chronological significance in the area; and, 2) that by comparing the paste and temper of the sherds to local sources of clay it might be possible to determine if "atypical" design or rim forms identified within the collections were possible trade items. Following the definition of the provisional paste/temper categories, all remaining plain and decorated sherds were purposefully broken and examined using both 10 and 20 power magnification for possible inclusion into one of the categories. It had been anticipated that several other categories would be identified during the course of the work;

TABLE 4. PASTE AND TEMPER CATEGORIES.

Category	Basic Description	Breakage	Average Particle Size	Average Thickness
I	Fiber(I), or fibrous w/ minimal sand inclusion(Ia)	laminar, tendency to edge shatter	fiber-no measure. sand-.16 to 1.3mm	11.2mm, 9.71mm (only two examples)
II	Fine quartz sand, minimal inclusions all sand particles	clean, slight shattering to ext./int. edge	quartz sand, .17mm	6.19mm
III	Medium sand & some grit, sand & grit both subangular	relatively clean, will vary to friable	sand-.21 to .57mm grit-.63 to 1.1mm	7.50mm
IV	Heavy sand & grit, sand subangular, grit angular	friable	sand-.21 to .57mm grit-.78 to 1.32mm	7.60mm
V	Clay particles & sand. Clay particles not crushed sherd	relatively clean, will break erratically dependent upon the number of clay particles.	sand within cat. II & III range	only one example, plain, 6.23

however, what occurred was basically a continuing refinement of the five provisional categories. Table 4 lists the characteristics of the five paste/temper categories identified within the Beaverdam Group collection.

While it is possible to logically order the sites on the basis of the percentage of paste/temper categories represented, the differentiation between the four sites is slight (Table 5). The lack of comparative analyses from a broader temporal range of sites also inhibits positive ordering. The fact that both 9EB219 and 9EB207 exhibit temporal components not identified at the other two sites would appear to have some bearing on the differences in terms of paste and temper category percentages, though this conclusion must be considered tentative in light of the limited collection size.

As will be noted, the differentiation between Categories II, III, and IV is slight, and the other two categories have only minimal representation. There would appear to be a rather consistent use of the same source materials, and with the possible exception of Category IV, which exhibited angular grit inclusions, there is no real indication of intentional additives being blended with the matrix material.

TABLE 5. PASTE/TEMPER CATEGORY FREQUENCIES.

	I	Ia	II	III	IV	V
9EB92	0	1.5	63.2	18.7	15.6	.7
9EB207	0	0	43.5	45.1	11.2	0
9EB208	0	0	69.0	28.5	2.3	0
9EB219	.4	0	51.2	28.5	19.8	0

ORDERING SCHEME:			
H = 50% or greater			
M = 16% to 49%			
L = less than 16%			
	<u>II</u>	<u>III</u>	<u>IV</u>
9EB92	H	M	L
9EB207	M	M	L
9EB208	H	M	L
9EB219	H	M	M

In order to determine if this conclusion could be substantiated, four clay samples were collected nonsystematically from the south bank

of Beaverdam Creek, within the basal level of 207BH8 (BH=Backhoe Trench), and from the south bank junction of Beaverdam Creek and the Savannah River. All samples were examined in a green clay stage with a 10 power hand lens to initially identify particle size and type. The samples were then reexamined following baking in a 400 degree oven for eight hours.

The four clay samples indicated the presence of quartz sand and both subangular and angular grit inclusions, the latter confined to Sample 3 which was recovered at the junction of Beaverdam Creek and the Savannah River. Particle size ranged from .17 - 1.1 mm in Sample 1 to .42-1.31 mm in Sample 4, well within the various paste/temper categories. While none of the four clay samples illustrated the same characteristics as paste/temper categories I and IV, the lack of such examples is undoubtedly due to collection error. Geological profiles at 9EB207 revealed the presence of clay lenses with both quartz sand and balled clay inclusions, which would presumably fire out in much the same way as the sherd which represents paste/temper category V. With regard to paste/temper category I, much of the surficial bank clay noted during the recovery of the samples had vegetal inclusions, which would, if fired, undoubtedly resemble the paste/temper category I sherds. The paste/temper analysis and clay sampling then appears to indicate that the sherds recovered at the four sites were produced locally, though of course not necessarily on-site. Other results of the paste/temper analysis will be presented in the various artifact discussions within the site descriptions.

CHAPTER FIVE

SITE DESCRIPTIONS: THE BEAVERDAM GROUP

Introduction

This chapter presents a discussion of the four sites which comprise the Beaverdam Group. Each site is discussed in terms of its setting, previous work, research concerns, Phase I data recovery, artifact analysis, and interpretations. Prior to presenting the data on the Beaverdam Group, however, several points of clarification are required.

First, the site settings were prepared by our consulting geomorphologist, John Lenzer. The discussions reflect his interpretations based on field study at each of the sites. Where appropriate for the discussion, Lenzer has reviewed various interpretations by previous researchers.

Second, at three of the four sites (9EB92, 9EB207, and 9EB208) alpha-designations were used by previous investigators to identify areas of 1) high surface artifact density; and 2) subsurface cultural deposits. In each case, NWR was contractually responsible for focusing data recovery on these areas. Although our work located no areas of subsurface deposits that necessitated new designations, we did encounter surface concentrations that were clearly separated from those previously reported. To maintain consistency in recording, we likewise utilized an alpha-designation to identify the newly discovered areas. For example, at 9EB92, TRC recorded five surface concentrations, labeled Areas A-E. During our linear transect survey of

that site we found a sixth concentration which was given the designation Area F. Except where noted as identified by NWR, all alpha-designated areas were previously reported.

9EB92

Site Setting

The alluvial terrace which contains site 9EB92 (Figure 11) occupies large portions of a triangular area inside an acute bend in Beaverdam Creek, approximately one mile upstream from its juncture with the Savannah River. The terrace is bounded on the west by relatively steep upland slopes, and on the north and southwest by degraded cut-banks which extend down to the recent Beaverdam Creek floodplain. A broad, shallow depression extends north from the Beaverdam Creek bottom, nearly dividing the terrace in two. A saddle at the northern end of this depression joins the two relatively high portions of the terrace. Both of the gentle rises which flank the depression are elongated north-south. Each of these three features (i.e. the two rises and the central depression), include approximately one-third of the terrace area.



FIGURE 11. SITE 9EB92, LOOKING NORTHEAST.

Maximum dimensions of this terrace are 350 m east-west (near the northern end) and 400 m north-south (on the western side of the depression). Local relief within the terrace is some four meters. On the western side, the slope break between the upland and the terrace top occurs at approximately 120 m above sea level (ASL). The highest mapped point on the eastern rise is 122.4 m ASL. Except for the central depression most of the terrace lies between five and six meters above the flat, Beaverdam Creek floodplain to the north and east. At the western side of the central depression a narrow line of trees marks an artificially steepened portion of the slope which rises to the western crest. Both the western rise and the eastern rise are subdivided into gently rounded northern and southern crests by slight swales. Local relief between the crests and the swale floors is approximately one meter.

Eight backhoe trenches, the archaeological excavations, and the soil survey which covers the area (United States Department of Agriculture 1969) augmented this study with an abundance of stratigraphic data. Basically, the terrace is formed on an alluvial deposit of loam to sandy clay loam to clay loam, greater than two meters thick. Although Gardner and Barse (1980:42) state that, "The area is composed of four segments of this terrace which have been divided by erosion gullies," no topographic evidence of gullies was observed, and no stratigraphic evidence of gully-fill deposits was detected in the swales between the subsidiary crests. The shallow swales between the crests of the western and eastern rises appear to be the products of normal degradation under full vegetational cover.

The elongated central depression is open to the present Beaverdam Creek at its southern end. It appears to be a boggy area through most of the year. Deposits of stiff, silty clay and clay in the axial portion of the depression are evidence that the depression contains a filled channel, possibly of an ancestral phase of Beaverdam Creek. Along the western margin of the depression, a buried gravel fan or bar underlies a loam which contains possible archaeological features (see below). The major difficulty in interpreting the central depression as a relict channel of Beaverdam Creek is that the depression is closed to the north by the saddle which connects the western and eastern rises. If the depression represents a major filled gully, which developed following base level drop and formation of the terrace, the wedge-shaped gravel deposit must be a fan, rather than a bar. It is difficult to find a source of gravel for the fan in this interpretation. These questions and their implications for interpretation of landform evolution will be considered at greater length below.

Crests of the eastern and western rises have apparently been subject to heavy sheet wash and wind erosion and large patches of the reddish-brown to reddish-yellow B horizon are exposed. Disruption of natural soil by plowing allows the silts to be blown away, and the clays to either be blown with them, or to be washed deeper by trickling down of surface water. This leaves the strongly

colored loam commonly observed on erosional or agricultural hillcrests in this area.

Previous Investigations

9EB92 was initially reported by Hutto (1970), who recovered three flakes from a surface context, but made no estimates regarding site size or the nature of artifact density (Hutto 1970:22). Taylor and Smith (1978), in conducting a more intensive survey of the site, estimated an approximate site size of 14,000 m² with cultural material confined to the plowzone (to 20 cm below surface). They reported both prehistoric and historic components and suggested that the site represented a limited use area.

The surface survey conducted by Taylor and Smith (1978:388) recovered 83 projectile points, 72 bifaces, five unifaces, 239 bifacially retouched flakes, 521 other flakes, two specimens of ground stone, and six examples classified as "other lithics." The lithics represent heavy quartz utilization, although the presence of other raw material types was noted. Diagnostic lithics included projectile point types Palmer, Kirk Corner-Notched, LeCroy, Morrow Mountain I and II, Guilford, Savannah River, Yadkin, and Badin, indicating occupation from the Early Archaic through Mississippian.

In addition to lithics, a small sample of ceramics was recovered which included 35 plain and three decorated sherds. Dates for these artifacts were given as Early and Late Mississippian, the latter apparently representing a Lamar component.

9EB92 was most recently investigated by TRC immediately following disking which provided excellent surface visibility (Gardner and Barse 1980). That project included the excavation of 11 1 m by 1 m pits and three 2 m by 1 m units in five areas of the site designated alphabetically A through E. Areas A and B are located in the low-lying area between the depression on the east and a wooded area that rises to a ridge on the west. Areas C, D, and E are located on elevated portions of the terrace (Figure 12).

Based on TRC's excavations, two typical, but very similar, profiles drawn from pits in Areas A and C, were used to discuss site stratigraphy within the TRC preliminary report. The first profile, in Area A, consists of a medium brown sandy loam plowzone underlain at 12 cm by an orange brown plowzone. Below these plowzones is an orange brown sandy clay loam which was defined as a B horizon. In Area C, the plowzone consists of a medium brown silty loam extending to a depth of 22 cm where it is underlain by a red silty clay loam B horizon containing numerous manganese nodules.

TRC's excavations revealed that the majority of artifactual materials were confined to the plowzone; however, sub-plowzone features were encountered in Area D (Gardner and Barse 1980). One, a truncated pit, measured about 26 cm square and extended 8 cm into the

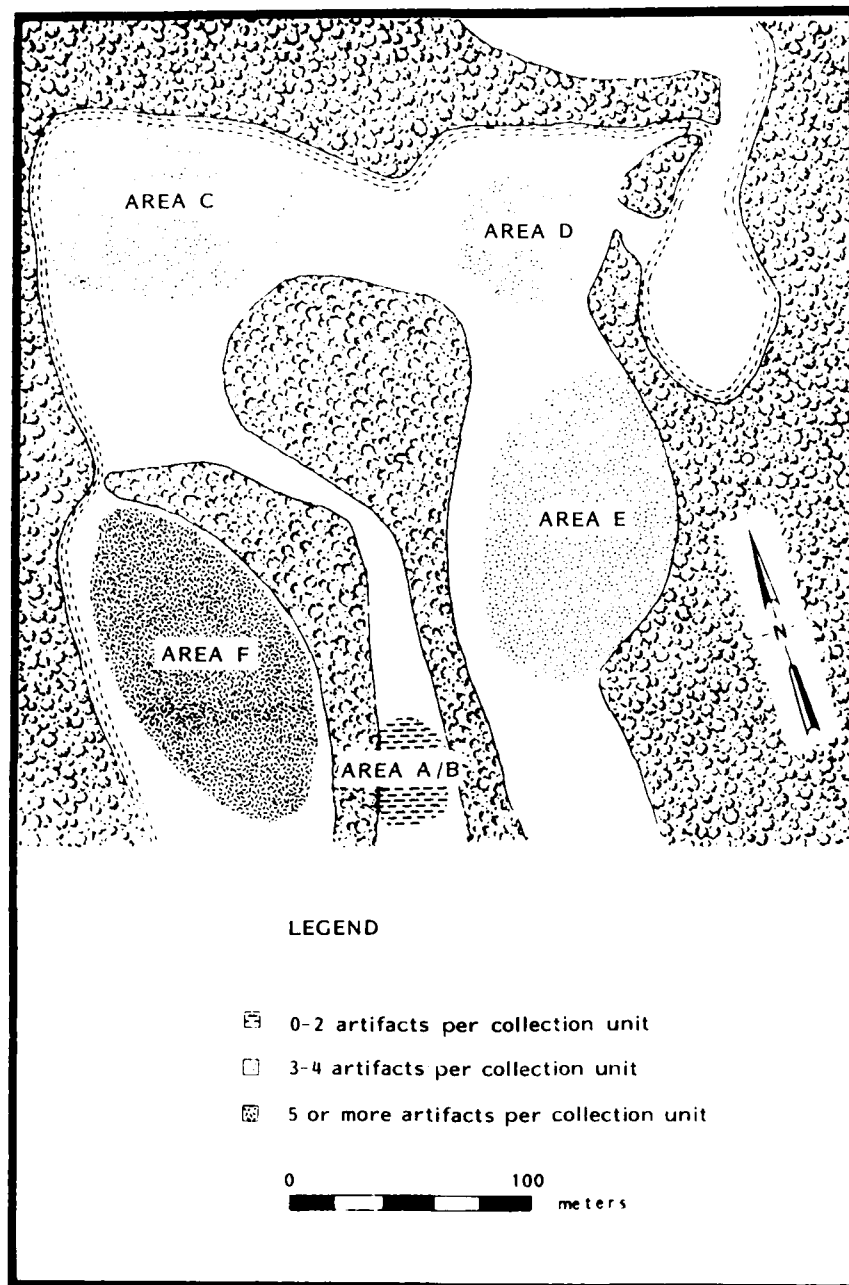


FIGURE 12. ARTIFACT DENSITY WITHIN AREAS A THROUGH F, 9EB92.

B horizon. Three plain ceramics were recovered from the base of the pit. A second feature appeared as a cluster of fire-cracked rocks unaccompanied by any diagnostic materials. In addition to these features, several small round stains, possibly representing postmolds, were mapped, but not excavated.

From the surface collection and excavations, a total of 76 ceramics were recovered, the majority of which are plain. Of the decorated types, the highest percentage falls within the Etowah and Lamar series. The lithic material recovered indicated a possible late Early or early Middle Archaic occupation. For the most part, however, the lithics were nondiagnostic flakes, except for the presence of steatite bannerstone fragments, a steatite gorget, and steatite bowl fragments, which may suggest a Late Archaic manifestation. On the basis of their work, TRC recommended further work at 9EB92. Most significant in their opinion were the possibilities of a Late Archaic component in Area C and the Lamar component. In addition, three possible postmolds and subplowzone pits in Area D suggested the remains of a structure.

Research Issues

The previous investigations tentatively identified the major component at the site to be a Lamar period occupation. The presence of diagnostics of other periods, however, also suggested the possibility of earlier activity. Establishing chronological control over the components at the site was one of the main goals of work at 9EB92. It was necessary to: 1) define the components present; 2) determine the temporal differences in intensity of occupation; and 3) assess temporal differences in intrasite patterning.

Interpretation of the Lamar occupation, however, was the principal focus of our proposed work. In agreement with TRC, we felt that Area D might represent a domiciliary locale, therefore, evidence of house(s) might be present as well as features representing trash deposits, storage locations, cooking pits, and hearths. The excavations posed a strong potential for obtaining data on the configuration of Lamar structures and possibly associated specialized activity areas. The incorporation of flotation of cultural deposits was viewed as a valuable technique for obtaining subsistence remains and reconstructing subsistence strategies, diet, and, if possible, seasonality.

Current Investigations

During the controlled surface collection at 9EB92, the site was partially overgrown in high, but sparse grasses. In making collections, crew members manually cleared the grasses to thoroughly inspect the surface for artifacts within each collection square.

The survey results confirmed Gardner and Barse's (1980) locales of higher artifact concentrations in Areas C, D, and E. However, in

Areas A and B, a very low artifact density was noted, and, in fact, the materials were so limited in number that we were unable to make a clear distinction between A and B (Figure 12).

The transect survey also confirmed the absence of materials in the wooded areas of the site. However, in one of these areas, between A and B and the terraces occupied by D and E, a one meter square excavation unit was relocated. Although the pit was backfilled, four corner stakes remained. This excavation was not illustrated or discussed in any of the reports by previous investigators. Its location was mapped later in our investigations; although not shown on Figure 12, it lies 70 m west of the southwest corner of Area E.

Following the survey, the agricultural lessee disked the field in which the site is located, so visibility was greatly improved as excavations were inaugurated. A general reconnaissance was conducted over the site to check the results of the transect survey under improved surface conditions. The slopes of the depression were found to be scattered with numerous lithics and a few ceramics, probably resulting from erosion and plow displacement. Areas A and B, however, even during inspection after a hard rain, yielded minimal artifacts. Our inability to clearly distinguish the two areas led us to combine the locale into a designation of A/B (Figure 12). An important observation was made, however, as a result of the reconnaissance. In inspecting the wooded area and ridge crest west of Area A/B, we identified a sixth artifact concentration that had not been formally designated by TRC, apparently owing to sparse if any visible materials at the time of their survey. Designated Area F, it was incorporated into our Phase I investigations.

The excavation program called for stripping a 6 m by 5 m swath in Areas A, B, C, D, E, and F in order to expose possible sub-plowzone features (Figure 13). Since Area A/B combined two of the previously reported concentrations, a single 6 m by 10 m swath was stripped. Additionally, in Area D, the 5 m by 6 m swath was expanded 1.5 m on the east and 2 m on the west to examine the continuation of possible posthole patterns (Figure 14).

A total of 15 stains and two rock clusters were found in Area A/B, nine in Area C, 28 in Area D, and seven in Area F. All of the stains in Area A/B turned out to be roots. The rock clusters produced no artifacts and they were associated with only a slight soil color change. We cannot say for sure whether they are cultural; however, it is possible they represented packing in the base of postmolds which had been all but destroyed by erosion and plowing. In Area C, none of the stains were cultural and of those observed in Area F, only one was a postmold.

As suggested by TRC, Area D was the most productive in terms of cultural remains. Of the 28 stains noted in the backhoe cut, 19 were postmolds, one was a possible post, five were pits, and three were roots. As shown on the figures accompanying this section,

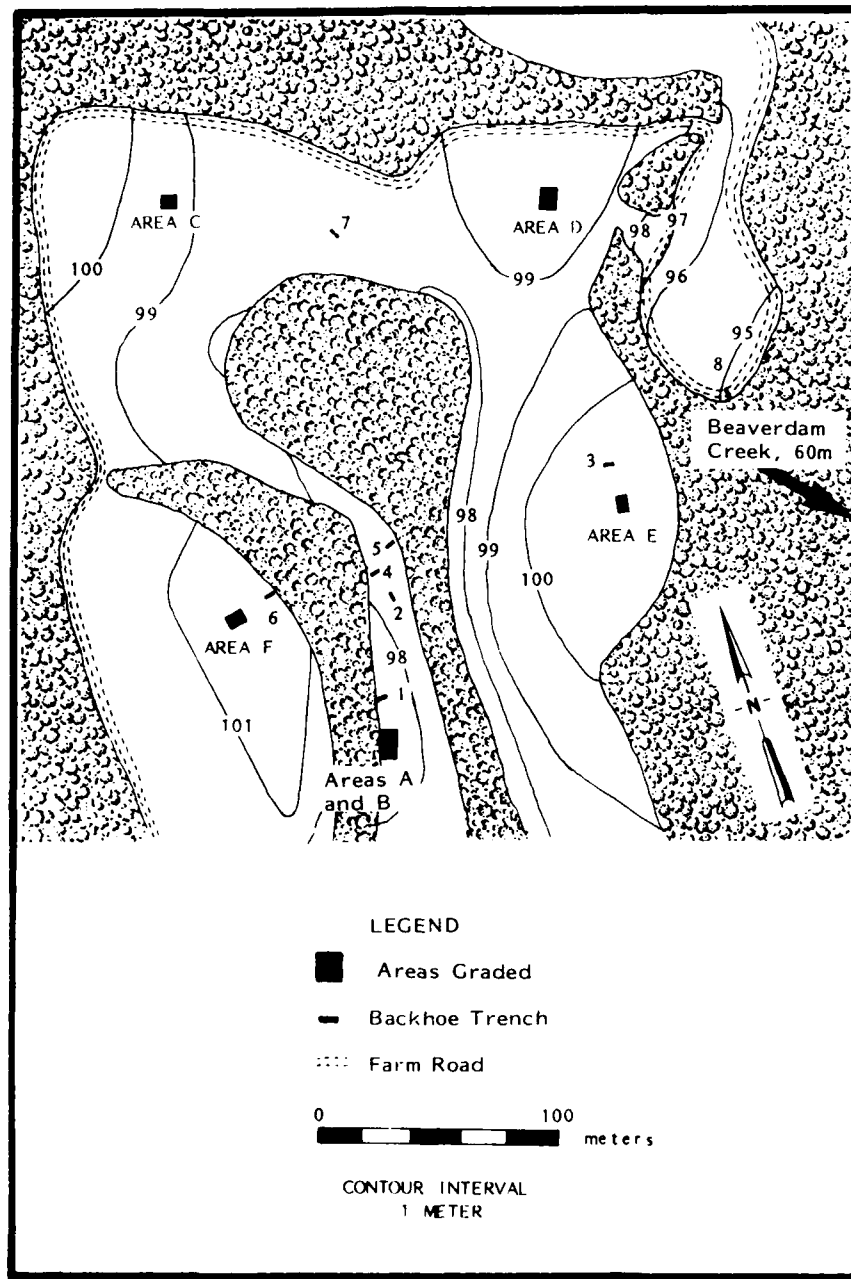


FIGURE 13. CONTOUR MAP OF 9EB92 SHOWING LOCATIONS OF BACKHOE TRENCHES (1 - 8) AND STRIPPED PORTIONS OF AREAS A THROUGH F.

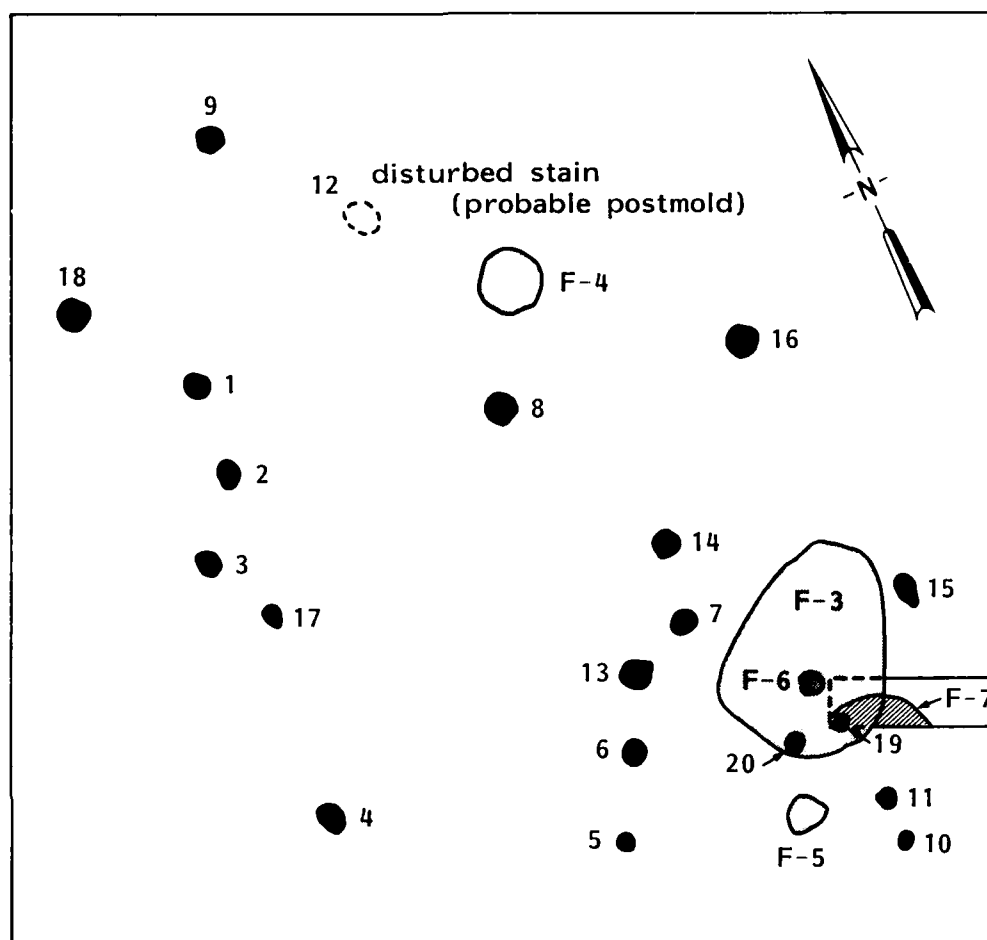


FIGURE 14. PLAN VIEW OF AREA D, 9EB92, SHOWING FEATURES, POSTMOLDS AND POSSIBLE STRUCTURAL REMAINS.

- = SHALLOW BASIN
- = POSTMOLDS
- & ○ = NON-POSTMOLD FEATURES
- = TRENCH AREA

NWR

the postmolds were given their own set of numbers to distinguish them from other features such as possible refuse pits. Examples in this latter category were identified as F-3, F-4, etc.

None of the postmolds formed a complete pattern, but several of the posts were in a straight line and in the southeastern corner of the backhoe cut, five postmolds seemed to form a right angle that, if it continued, would go into an uncleared area (Figure 14).

The non-postmold features included two which were initially thought to be pits and given the designations F-1 and F-2. Their depth and configuration, upon excavation, proved they were postmolds.

Feature 3 was first identified as an area of baked clay, clearly distinct from the surrounding matrix. Numerous shallow (ca. 2 cm) plow scars cut through the feature, so prior to excavation each of these was cleaned out. In addition, two postmolds and a pit intruded into the baked clay (Figure 14) and were excavated prior to Feature 3.

Excavation of Feature 3 proceeded in a series of careful sectionings. It was characterized by a red clay fill that was distinguishable from the surrounding red clay matrix. The feature could be the result of tree fall or could have been deliberately filled during the prehistoric occupation. Very few artifacts were recovered from the fill; included were one smoothed body sherd, two burned clay fragments, two flakes, one biface fragment, one backed biface and four pieces of debris.

At the southeastern corner of Feature 3, however, we did locate a bell-shaped pit underlying the baked clay and marked by extremely dark silty loam. Designated Feature 7, it was exposed by a one meter trench since the agricultural lessee was literally poised with his tractors ready to cultivate at the time it was encountered (Figures 14 and 15).

The feature measured about 1.5 m east-west with 10 cm of disturbance caused by the intrusion of Postmold 19 which was clearly distinguished in profile (Figure 15). Artifacts recovered from Feature 7 included both lithics and ceramics, the latter consisting of one smoothed body sherd, an applied rim sherd with amorphous decoration, and one curvilinear complicated stamped sherd.

Feature 4 was first observed as a cluster of rocks in the northern part of the backhoe clearing (Figure 16). It measured 62 cm by 65 cm and was approximately 20 cm deep. Excavation around the rocks also revealed a somewhat mottled stain underlying the rock cluster. Interestingly, this configuration was identical to Feature 2, found in Area D by TRC (Gardner and Barse 1980). Artifacts included a perforator, several flakes, chunks (some of which appeared to have been

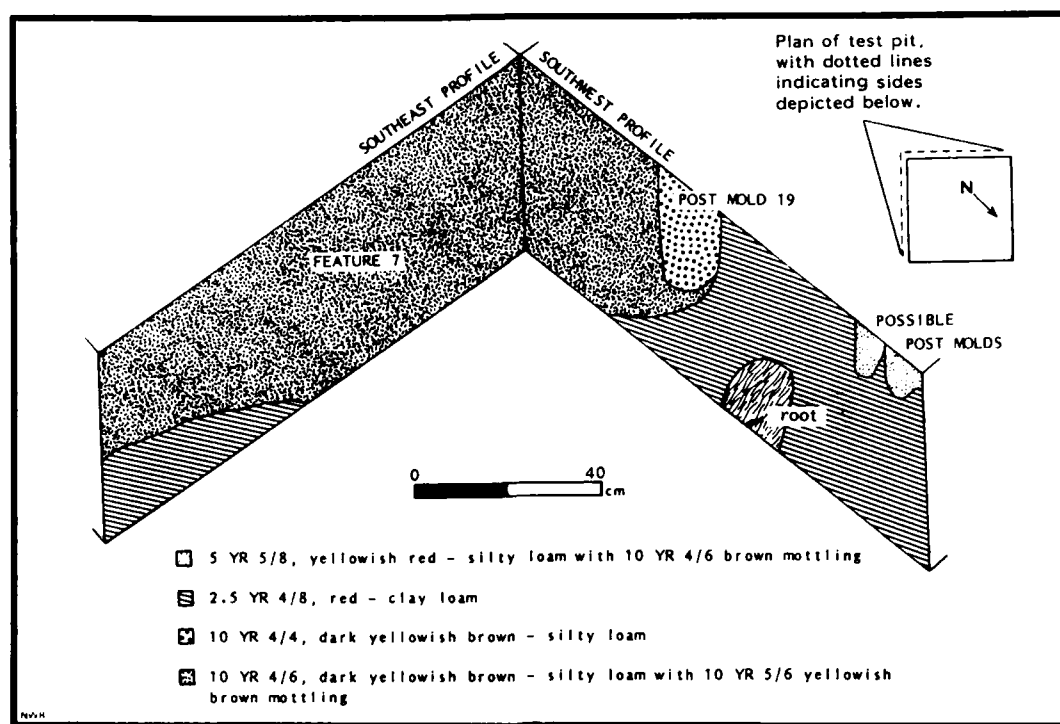


FIGURE 15. PROFILE OF FEATURE 7, 9EB92.

fire-cracked), and a Savannah River projectile point. The underlying stain was sectioned (Figure 17). The stain was extremely amorphous and highly mottled and may have represented a disturbed midden pocket. Although several flakes were found in the fill, no diagnostics were recovered.

Feature 6 was a shallow pit which intruded into Feature 3. It was about 20 cm in diameter and 10 cm deep, and yielded several lithics and ceramics, including one rectilinear complicated stamped sherd. Feature 5 was just southwest of Feature 3. The pit was roughly circular with a diameter of 40 cm. It contained a dark brown silty clay loam that extended to a depth of 23 cm. Unidentifiable bone fragments, lithics and ceramics were recovered from the fill.

Artifact Analysis

The artifact collection from 9EB92 includes 177 ceramics and 767 lithics (Tables 6 and 7). Unlike the other sites in the Beaverdam Group, the lithic assemblage is characterized by a high percentage of chipped stone and groundstone tools (18.4 percent); however, like the other sites, the percentage of decorated ceramics in the collection is relatively low (14.1 percent). The diagnostics present indicate that the site was utilized from the Archaic period into the Late



FIGURE 16. FEATURE 4 ROCK CLUSTER, 9EB92.

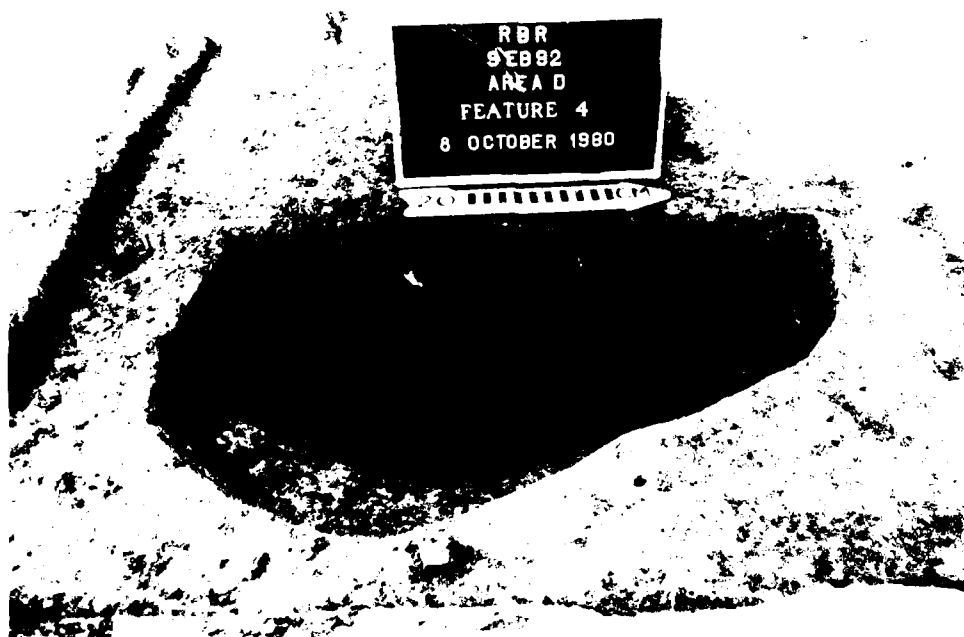


FIGURE 17. FEATURE 4 AFTER SECTIONING, 9EB92.

TABLE 6. SITE 9EB92 - GENERAL CERAMIC SUMMARY

	GENERAL	AREA C	AREA D																AREA F	TOTAL	
			PM. PM. PM. PM. PM. PM. PM. PM. PM. PM. PM. PM. PM. PM. PM. PM.																		
			Comb. A/B	Sub. Surf.	Surface test	14	13	11	10	9	7	6	5	4	Feat. 3	Feat. 5	Feat. 6	Feat. 7			
Plain																					
Rim																					
Bowl	1			2					1									1	5		
Jar	1								1										3		
Neck																					
Bowl																					
Jar																					
Body	2	1	5	1	23	19	3	1	2	1	3	1	1	1	4	5	7	50	133		
Smoothed																			5		
Other																					
Lughandle						1					1								2		
(Ext. rough), burnished int.															1	1			2		
Burned clay																					
SUBTOTAL	3	2	5	1	24	22	1	3	2	1	5	5	1	1	3	3	5	6	8	51	152
Decorated																					
Rim - other, applied																		1		1	
Folded					1															1	
Body																					
Check Stamped																					
Savannah-like																					
Lamar Bold Incised																		1		1	
Lamar-like C.S.						1														1	
Woodstock C.S.																				1	
Rect. C.S.																	1			1	
Etowah C.S.																				1	
Savannah C.S.																				1	
Dec. eroded																				1	
Crumbs					2	5												4		5	12
SUBTOTAL					4	6														7	25
Totals	3	2	5	2	28	28	1	3	2	1	5	5	1	1	3	3	9	7	10	58	177

TABLE 7. LITHIC AND GROUNDSTONE ASSEMBLAGES RECOVERED FROM 9EB92

	Gen. Surf.	Surface					Sub.		Feature							TOTAL
		A/B	C	D	E	F	C	D	1	2	3	4	5	6	7	
FLAKES																
unmodified																
whole	19		6	18		3	1	4	1			5	1	1	4	63
fragments	84		18	41		29	2	46	4	11	1	36	9	5	21	307
modified																
whole	4					1										5
fragments	13	1		9		1		2								26
Subtotal - flakes	120	1	24	68		34	3	52	5	11	1	41	10	6	25	401
CHIPPED STONE																
unifacial																
fragments	1					2										3
drill				1		1										2
backed scrap.	1															1
punch/awl	1			1												2
flake graver	2							1								3
spokeshave	1															1
bifacial																
biface	3		3	1	1											8
roughout	4			2		1										7
punch/awl	1															1
fragment	17	1	1	14		3				1	1				2	40
backed biface	5			1		2		2			1					11
knife	1															1
scraper	1															1
drill				1	1											2
points																
quartz crude				3												3
shield-shaped	1					1										2
leaf-shaped				1												1
Palmer						1										1
Morrow Mt. I	1			1												2
sm. triang.				1												1
Savannah R.				2							1				1	4
Gilford lance.						1										1
fragments	7			25		5	1									38
Subtotal - tools	47	1	4	54	2	17	1	3		1	2	1		3		136
OTHER																
debris	57		7	31	1	30	5	20	1	9	4	16	3	1	18	203
cores	17		1	2		1										21
hammerstones				1												1
Subtotal - other	74		8	34	1	31	5	20	1	9	4	16	3	1	18	225
GROUNDSTONE																
shaft smoother	1															1
abrader fragment				1												1
celt-bit			1													1
net sinker									1							1
mano														1		1
Subtotal- ground st.	1		1	1					1						1	5
GRAND TOTAL	242	2	37	157	3	82	9	75	7	21	7	58	13	7	47	767

Mississippian, though the Woodland period occupation is ill-defined. This range of occupation confirms the results of previous work (Taylor and Smith 1978; Gardner and Barse 1980).

The ceramic collection is marked by several decorated types (Table 6) which indicate that the best defined temporal components at the site date to the Savannah II and Lamar periods. As with the lithics, the distribution of the ceramics indicates different areas were occupied at different times. The majority of the Savannah II ceramics were recovered in Area D, while in Area F, both Savannah II and Lamar types were identified. Area C, conversely, produced the single incidence of a Woodstock-like complicated stamped ceramic which may date to the Late Woodland.

As noted, the lithic assemblage (Table 2) is characterized as having a relatively high proportion of tools (18.4 percent). Bifacial tools compose 87.9 percent of the chipped stone and groundstone assemblage, and of this percentage projectile points represent 42.7 percent, relatively a higher percentage than at the other sites. Stone material selected for tool use was predominantly quartz (76.4 percent).

The occurrence of roughouts, biface fragments, and projectile point fragments reflects probable manufacturing of these bifaces at the site. A wide variety of small perforating, cutting, and graving tools are present but the backed biface stands out as relatively common in the assemblage. Although the function of this tool is unknown, it is possible that its presence and function is a key to understanding the function of this site. Tools are most numerous in Area D, revealing it to be a probable locus of tool use.

Of the 53 projectile points or fragments recovered, 15 are identifiable. They span the Early Archaic through Mississippian periods. The Early Archaic is represented by a single Palmer point (Coe 1964:67). The Middle Archaic points are two Morrow Mountain I points (Coe 1964:37:43) and a Guilford Lanceolate (Coe 1964:43-45). Four Savannah River points represent a Late Archaic component. Other points include three Quartz Crude Stemmed, Leaf-shaped, Narrow and Medium; two Stemmed Triangular and Shield Shaped, Medium Small, which could date from the Archaic through Mississippian times (except for the Stemmed Triangular which ends in Early Woodland) (Wauchope 1966). Because of the wide date range for these point types, they alone do not clearly demonstrate a Mississippian occupation. A single Small Triangular point is, however, Mississippian (Wauchope 1966:161-163).

The majority of the points, including all the Late Archaic examples, are concentrated in Area D, mirroring the pattern of the other tool types, but not indicating a specific limited age for that area's assemblage. Points in Area F include the Palmer, the Guilford and one of the Stemmed Triangular and Shield Shaped points, which tends to indicate the earliest habitations were perhaps more restricted to that area.

Site Interpretations

The eight backhoe trenches placed at 9EB92 indicate that like the terrace remnant at site 9EB219, but unlike that at 9EB207, the terrace which contains site 9EB92 was formed solely by Beaverdam Creek deposition and erosion. The two elongated rises and the contained depression appear to represent the remains of a filled channel of a higher-discharge, ancestral phase of Beaverdam Creek. Loams, silt loams, and clay loams of the two rises (generally containing minor amounts of fine gravel), and stiff gray clay in the subsurface of the depression bear out this interpretation.

In cross-section the rises and depression exhibit dimensions which show that in this area the interpretive channel would have been at least twice as wide as the present Beaverdam Creek. The thickness and red colors of the argillic B horizons in the rises indicate a probable age of 10,000 to 20,000 years for the floodplain deposits (John Foss, personal communication 1980). In the low ridge which connects the two rises and blocks the northern end of the depression, the argillic B horizon is thinner and the red color not as well-developed. According to soil age estimates this material was probably deposited after 10,000 and before 6,000 years ago. The backhoe trench excavated to a depth of 1.5 m (5 ft) on this ridge (92BH7) (Figure 13) did not penetrate to the surface of the channel deposits which are interpreted to underlie the ridge.

Geomorphic events in the area around the present terrace can be tentatively interpreted from the available data. At some time, probably prior to 10,000 years ago, the base level of Beaverdam Creek in this area was higher than at present, and the creek formed a floodplain now represented by the terrace remnant at site 9EB92. During this phase of activity, a bend of the creek was cut off and the abandoned channel became a lake, which was gradually filled with clay during floods of the creek. The ridge across the northern end of the depression probably began as a bar across the upstream end of the cut-off channel.

Foss and Segovia have interpreted their more extensive data to show that an episode of Savannah River down-cutting ended by approximately 12,000 years ago, followed by alluviation in the Savannah River floodplain until approximately 6,500 years ago. Events which cause changes in the depositional regime of a stream, however, do not always simultaneously (if at all) affect its tributaries, and no good temporal correlation between Savannah River and Beaverdam Creek events is possible at this time. The Beaverdam Creek floodplain was dissected after a lowering of the creek base level occurred, perhaps around 3,000 to 4,000 years ago, eventually producing the present terrace remnant (John Foss, personal communications 1980).

Prehistoric artifacts from 9EB92 indicate activity during the Archaic, possibly Late Woodland, and Mississippian periods. Although

scattered artifacts were found throughout the site, Areas D and F produced the greatest quantity of cultural materials.

Of these two productive areas, Area D was the locus of the more intense activity, evidenced by the fact that it produced 60.5 percent of the total ceramics and 47.4 percent of the total lithic and groundstone assemblages. Further, the backhoe cut in this area produced evidence of features, including a number of postmolds. Again, none of the posts formed a complete pattern. In the southeastern corner of the pit where a possible right angle was formed by several posts (numbers 20, 19, 11, 10, and 5), the posts seem to surround Feature 5. Feature 6 is located outside the right angle corner. Both of these features yielded ceramics from the same vessel dating to either Savannah II or Early Lamar. In addition, Postmolds 10 and 11 yielded the sherds with burnished interiors and roughened exteriors which were burned. These ceramics are approximately contemporaneous with the sherds from Features 5 and 6, adding more support to overall contemporaneity of at least these posts and the two features.

The relationship between Features 3 and 7 and Postmolds 19 and 20 in this area is a little difficult to interpret. Again, we are not convinced of the nature, function, or origin of the baked clay area designated Feature 3, but Feature 7 is clearly a trash pit as evidenced by the lack of undifferentiated feature fill and varied artifact contents. It is apparent that Feature 7 was excavated before the postmolds were placed in the ground since Postmold 19 intrudes into the underlying fill of Feature 7, while Feature 6 and Postmold 20, also within the baked clay area, were excavated into the surrounding clay matrix. If the postmolds are associated, they may represent a modification or new construction. It would have been necessary for the builders to cap the trash pit and any existing postmolds to provide a suitable surface for the new posts. Whether Postmold 14, which also yielded a burnished interior/roughened exterior sherd, is related to these other postmolds is unknown; however, the sherd from Postmold 14 was not burned, whereas those from Postmolds 10 and 11 were.

Although the data are inadequate to evaluate further possible structural associations, it is clear that a Savannah II or Early Lamar component is present in Area D. In addition to the Mississippian component, diagnostics such as Savannah River points and soapstone fragments suggest Late Archaic activity. Our data support the indication of a Late Archaic component as suggested by TRC; however, the diagnostics are very few. With the exception of Feature 4, which may be a Late Archaic rock cluster, we were unable to isolate any area of the site that was specifically utilized during that period.

In Area F, only a single postmold was found, but the area did produce 32.7 percent of the total site ceramics. This relatively high frequency may be a factor of surface visibility rather than a reflection of intensity of activity since Area F was systematically collected after the lessee had disked the field.

The majority of ceramics in Area F were plain body sherds, but decorated wares were represented by one Lamar Bold Incised, one rectilinear complicated stamped, and one curvilinear complicated stamped. The rectilinear complicated stamped sherd is overstamped, poorly executed, and distinct from that recovered in Area C. The design suggests a Savannah II to Lamar date (Hally 1970, 1979; Wauchope 1966). The curvilinear complicated stamped sherd fits nicely with this chronological placement as well. Lamar Bold Incised makes its appearance in the Lamar period and is present in Duvall phase assemblages, though in small numbers (Smith n.d.).

In terms of lithic diagnostics, four projectile points were found at Area F. These included the types Palmer and Guilford Lanceolate, the former dating to the Early Archaic and the latter having a possible range of Middle to Late Archaic. The remaining two points were shield-shaped and stemmed, but not typed. One is rather small and may be a type associated with the Late Woodland or Mississippian period (Wauchope 1966:125).

Although TRC suggested a Late Archaic component might be present at Area C (Gardner and Barse 1980), no cultural features were exposed. No projectile points were found in Area C and the lithic collection does not include items such as soapstone that might be associated with a Late Archaic occupation. From the available data, only very limited use is indicated at Area C. One decorated ceramic was found in an excavation that turned out to be a root (Table 6). This piece was a rectilinear complicated stamped sherd that was characterized by a clearly defined stamping technique. Although we have only a single specimen of this type, it most closely conforms to Napier/Woodstock types (Wauchope 1966), which would indicate a Late Woodland into Mississippian affiliation.

9EB207

Site Setting

A triangle of low-relief alluvial terrace bounded on two sides by flowing water contains site 9EB207. On the northwestern side is Beaverdam Creek, flowing northeastward, and on the southeast is a very gently curved bank of the Savannah River, which courses southwest and south (see Figure 18). Both these sides are approximately 600 m long. At the northeastern apex, the creek curves around to the southeast to join the river. The shorter, southwestern side is separated from the steeper upland slopes by a shallow swale, which is interrupted and covered in the center by a small, low-relief alluvial fan (Figure 18). The southeastern angle of the triangular terrace contains a short, first-order, drainage swale which extends northwest, nearly halfway across the terrace.

Except for the last-mentioned drainage swale, and a narrow band of the most recent creek and river channel-margin deposits at the northeastern apex and along the southeastern side, the entire terrace surface lies higher than 116 m ASL. Four low-relief rises are present on the terrace top, separated by gently-sloping swales (see Figure 18). Local relief between the rise crests and the swale bottoms is probably less than one meter. The deepest portions of the interrupted swale along the southwestern side of the triangular terrace are less than one meter lower than the adjacent terrace top northwest of the alluvial fan, and between one and two meters lower than the terrace, southeast of the fan. Cut-banks approximately three meters high descend to the Beaverdam Creek channel on the northwest side of the terrace. On the Savannah River side a degraded cut-bank and/or the slope of a depositional bar separates the low-water channel margin from the terrace top by three to four meters. As described above, the southeastern portion of the terrace contains a short drainage swale; its sides slope gently down from the terrace top to the Savannah River channel.

Previous Investigations

Taylor and Smith (1978:369) estimated the size of 9EB207 as 250,000 m². It was noted to be at least moderately disturbed by on-going agricultural activity. The size of the site necessitated subdivision of the area into several provenience units, and a limited sample of artifacts was collected from each unit. In addition to the collection procedure, some areas of the site were tested using a power auger to determine the depth of cultural deposits. Unfortunately, we do not know the locations of these tests since they were not identified by Taylor and Smith (1978).

On the basis of these procedures, Taylor and Smith indicated the presence of a definite Middle Archaic component represented by a quartz Morrow Mountain I point, and, although not noted on their Appendix A summary, probable Woodland and Mississippian manifestations evidenced by the recovery of 19 ceramics (Taylor and Smith 1978:427). In addition to the Morrow Mountain point and the sherds, ten other bifaces, one uniface, 35 bifacially retouched flakes, and 123 other flakes were recorded for the site.

A closer examination of their ceramic data permits preliminary refinement of the possible temporal components at the site, though the assignments must be considered tentative. The presence of fine sand-tempered sherds and one incised sherd point to an occupation during the Early Woodland period (Wauchope 1966). Further, the occurrence of both burnished and rectilinear complicated stamped sherds suggests a Late Woodland/Mississippian occupation. The possible presence of such components is of special note when viewed in light of subsequent work conducted in 1979 by TRC.

At the time of the TRC work, the site had been recently plowed, allowing for maximum surface visibility. Topographically, TRC

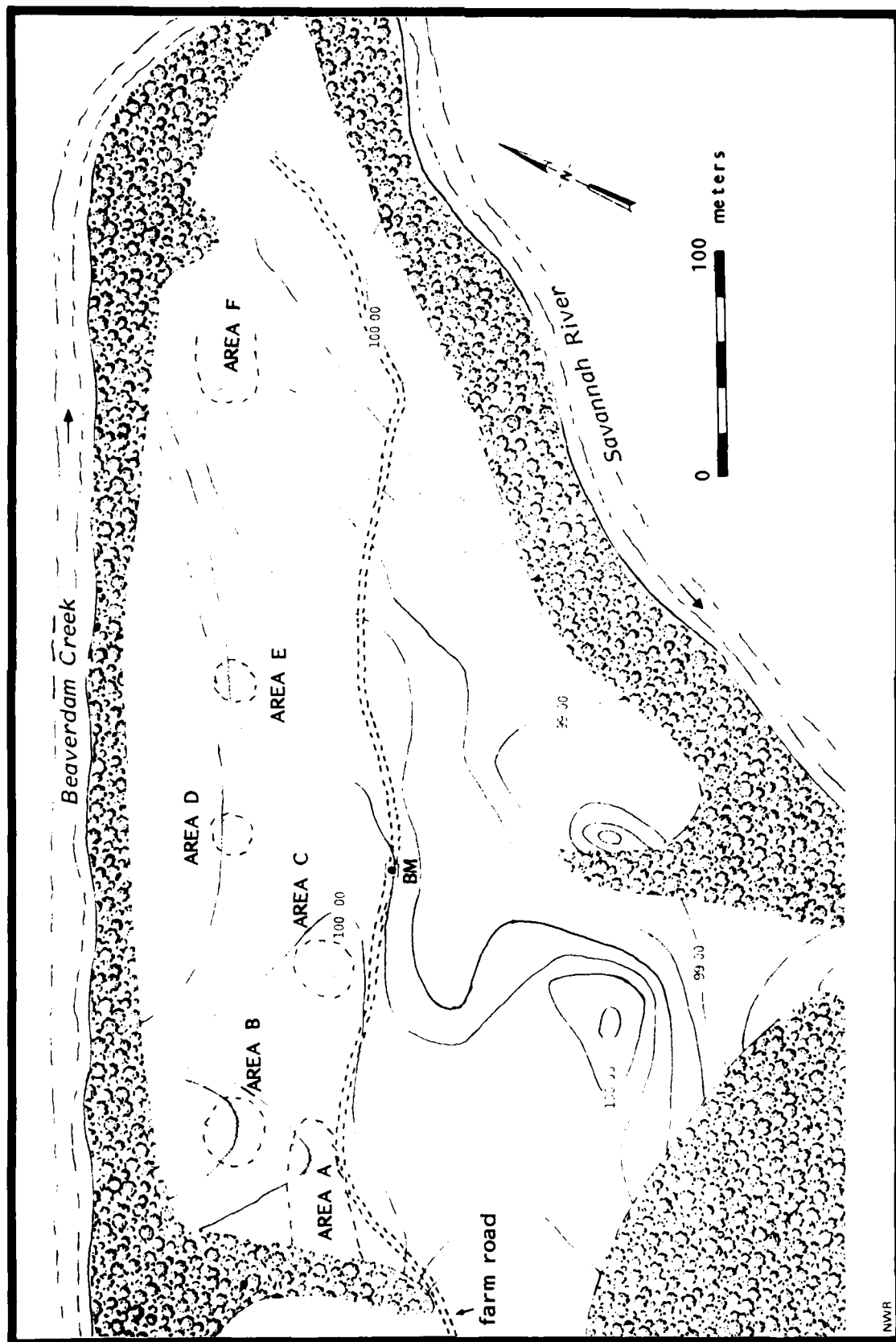


FIGURE 18. CONTOUR MAP OF 9EB207 SHOWING AREAS A THROUGH F.

indicated that the major portion of the site was situated on an old terrace above the Beaverdam Creek floodplain, but that portions of the site area had been partially masked by recent alluviation (Gardner and Barse 1980). The higher, unalluviated sections of the terrace had been exposed to considerable deflation, resulting in the loss of all A horizon, while the masked, presumably lower portions, had buried A horizons and/or plowzones. Surfacially, the deflated areas exhibited more visible artifacts, and in the alluviated sections the artifact frequencies were either low or nonexistent. On the basis of the initial examination, TRC divided the site into six arbitrary areas, designated as A through F (Figure 18). Apparently the TRC work focused on two questions: 1) the definition and delineation of the buried A horizon; and 2) the correlation of intrasite variability with the presence of buried A horizons.

TRC placed a total of 24 1 m by 1 m units in the six areas, with 10 excavation units clustering in two areas (five each) to expand feature exposure. The most intensive work was conducted in the western section of the site (around Area B), while in the eastern section (around Area F) only one test unit was excavated.

The excavations resulted in the identification of three basic profiles which indicated increasing geological complexity from west to east across the site. The buried A horizon, absent in the west, occurs in Areas C through F. In the west where maximum deflation has occurred, five features and two postmolds were defined. None were excavated, though stain dimensions and characteristics were noted.

The results of the TRC work led them to conclude that while a possible Early Woodland period occupation existed at the site, marked by Dunlap Fabric Impressed sherds, the major occupation appeared to be protohistoric Lamar. The latter conclusion was based on the presence of excurvate rim profiles on seven sherds, four incurvate bowl rims, one with a single node, and one small rim with an applique strip and single vertical incision. In addition to these diagnostic rim forms, two curvilinear complicated stamped sherds and one additional incised sherd were among the 186 ceramics recovered during the excavations (Note: a discrepancy exists between the level-by-level total, 186, and the summary total of 169 referred to in the discussion by Gardner and Barse 1980).

The areas of highest sherd concentration were B, with 36.5 percent of the total, and D, with 48.3 percent. All three of the Dunlap Fabric Impressed sherds came from one unit in Area B, with the Lamar material represented across the site, on top of the older terrace, and within the buried A horizon of the floodplain. Although TRC indicates that the fabric impressed sherds might be more indicative of a later fabric impressed series, the Taylor and Smith results would seem to confirm the possible presence of an Early Woodland component.

Research Issues

The results of the TRC testing program are of extreme importance for they indicated that deeply buried cultural deposits are present at the site. The eastern portion of the site, beginning in Area D and continuing east to Area F, has been subjected to masking alluvial deposition, reportedly resulting in Lamar materials in evidence beginning at no less than 53 cm below present ground surface. The intervening 0-53 cm levels are noted as virtually sterile of cultural materials, with the exception of a small number of artifacts which appear in the Ap level and which seem to be wash materials. Excavations conducted in the central (Areas D and C) and western portion (Areas B and A) of the site define a much less disturbed profile, though in Areas C and D, at a level between 25 cm and 32 cm below the surface, an Ab horizon is present. For the most part artifactual material in all four localities is confined to the Ab or immediate top portion of the B horizon. The five features defined in Areas A and B were located at the base of the first Ap level.

Although some mixing is apparent in the artifactual material, the majority appears to be representative of the Lamar period. The presence of Dunlap Fabric Impressed ceramics also indicates the possibility of Early Woodland occupation.

All indications are that the primary occupation at the site is Lamar, though earlier materials may be present. Given the current state of knowledge concerning the transition from Lamar to Ocmulgee Field/Creek assemblages, the site offers the opportunity not only to increase the data base, but as with 9EB92 to determine the nature of subsistence, and intrasite patterning.

Current Investigations

In line with the TRC recommendations, our investigations were aimed at determining the presence and extent of the buried A horizon at the site and assessing the cultural components present. On the basis of the TRC work, the site was divided into two sectors, designated west and east and distinguished from one another by the absence or presence of a buried A horizon. Five basic procedures were used over the site, though not all the procedures were instituted in each area. The procedures included: 1) a controlled surface collection (west); 2) stripping in the western sector of the site; 3) a testing program to define stratigraphy and locate the horizontal and vertical extent of the buried A horizon (east); 4) expanded excavations for Phase I data recovery where the buried A horizon was present (east); and 5) deep backhoe testing (primarily east). The locations of all excavation units are shown on Figure 19.

Following the systematic survey collection in the western sector, a contour site map was constructed using a transit. This was used as a comparison with TRC's map produced during their survey and testing program. When discrepancies occurred between the two maps, the

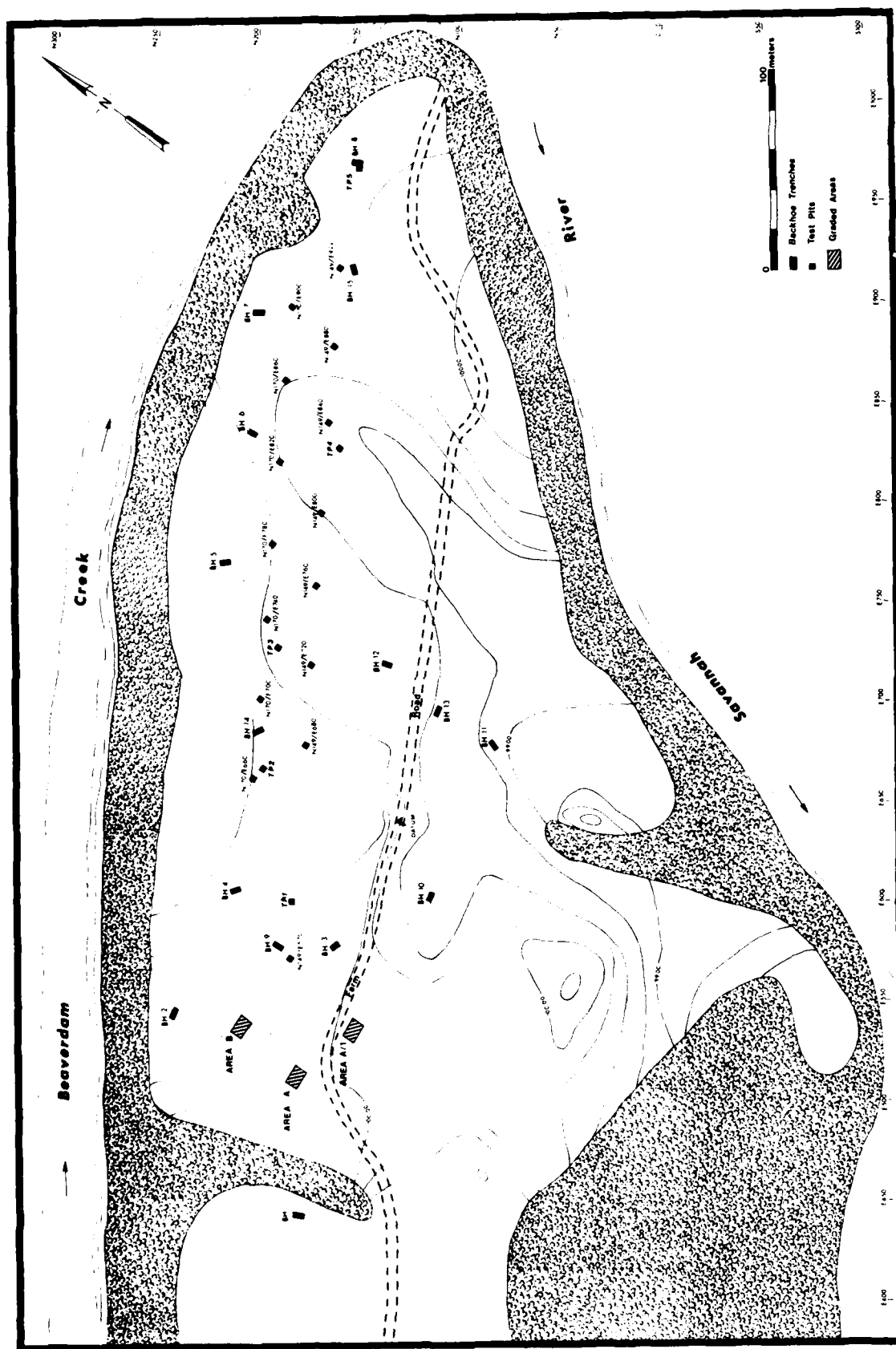


FIGURE 19. PLAN MAP OF 9EB207 SHOWING LOCATIONS OF STRIPPED AREAS, BACKHOE TRENCHES AND EXCAVATION UNITS.

transit coordinates were used. A permanent benchmark was not established at the site at the request of the lessee, but a temporary benchmark was placed in the farm road which bisects the site.

Western Sector: A controlled surface collection, conducted in the manner described in Chapter Four, was implemented in the western sector of the site. In this area, which encompassed TRC Areas A and B, and the extreme western portion of Area C, deflation was extensive and artifacts were visible on the surface. This artifactual expression was not apparent in TRC Areas D, E, and F, as determined following a general reconnaissance of all areas.

The surface collection was initially hampered by the fact that the site was in crop (Figure 20). Collection transects were subsequently aligned with the plow furrows to alleviate as much crop damage as



FIGURE 20. SITE 9EB207, LOOKING WEST.

possible and to allow for maximum surface visibility. In order to utilize the plow furrows, the north/south grid was oriented 59 degrees east of North. The collection transects were continued both south of the road and into the woods between the field and Beaverdam Creek.

As illustrated in Figure 21, the highest density of surface artifacts was in the vicinity of TRC Area B. Little in the way of materials were identified in the TRC Area A location, nor was there a continuation of the high Area B densities toward the east into Area C.

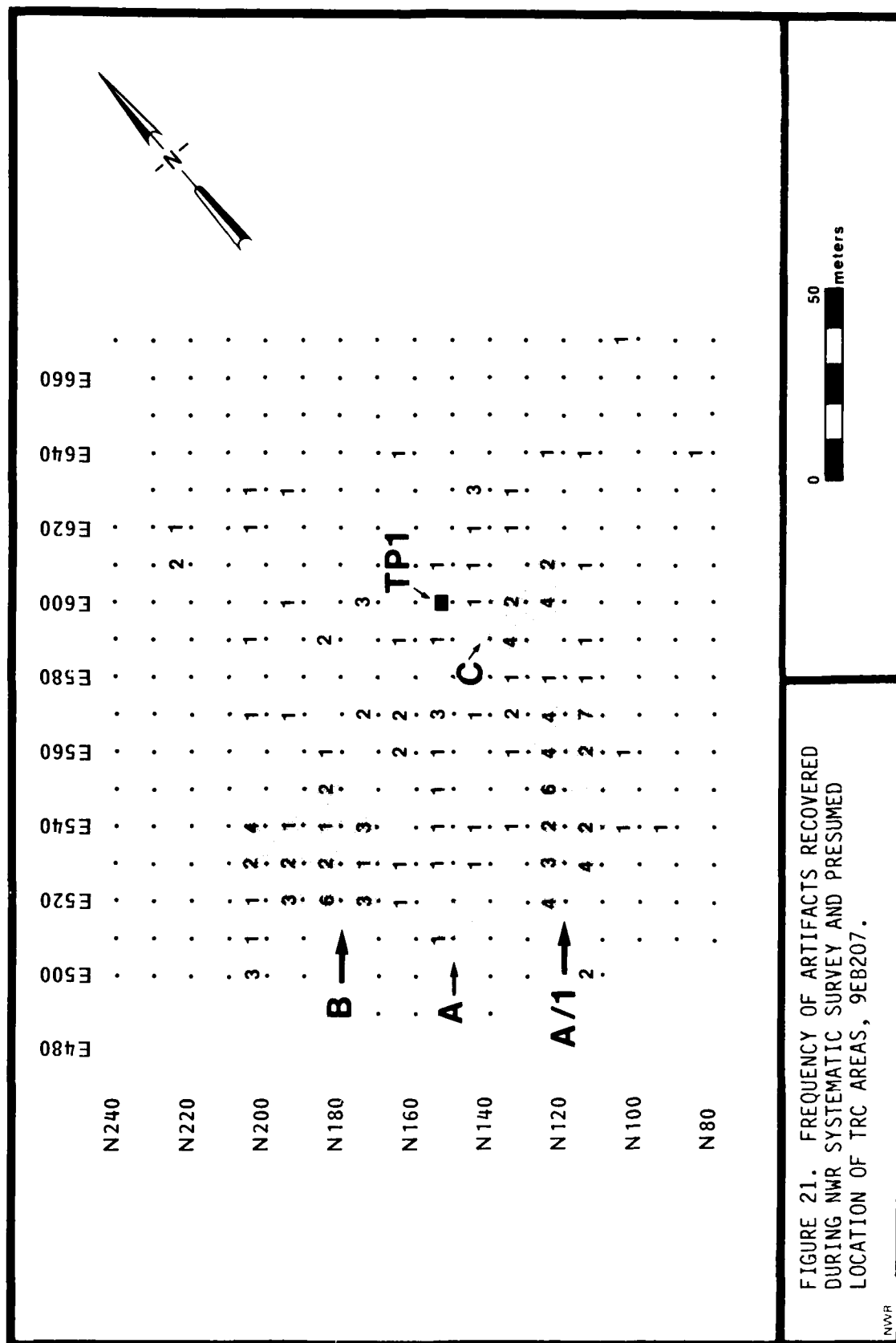


FIGURE 21. FREQUENCY OF ARTIFACTS RECOVERED DURING NWR SYSTEMATIC SURVEY AND PRESUMED LOCATION OF TRC AREAS, 9EB207.

NWR

One small concentration was, however, defined south of Area A, and was designated A/1. On the basis of these results, and following consultations with IAS, it was determined that control shovel tests and stripping would be conducted in Areas A/1 and B.

The two areas were flagged, and prior to the stripping of the 5 m by 10 m areas, control shovel pits were placed along the long axes outside the areas to be stripped. The shovel tests were approximately 50 cm square, 50 cm deep and were excavated to provide general stratigraphic information. They revealed the plowzone in both areas to be approximately 10 cm deep, directly overlying the B horizon.

Following the completion of the shovel tests, both areas were stripped, and then skim shoveled and troweled. In Area A/1, no stains were identified in the western half of the cut and virtually no artifacts were recovered during the skimming and troweling. While the stratigraphy of the western half confirmed the results of the preceding shovel tests, in the eastern section no definite B horizon could be defined. Consequently, an additional 50 cm square shovel test was excavated to the south of the cut. It revealed a silty loam matrix underlying the plowzone which could represent an older plowzone, a deep furrow, or an A₁ horizon.

In Area B, however, 12 stains were defined. All were excavated using procedures outlined in Chapter Four; four of the stains were cultural. On the basis of size and depth, three of the stains were designated as postmolds, while the fourth, Feature 1, was a roughly circular pit (Figure 22). Only a few flakes of charcoal were identified in Postmolds 1 and 3; no artifactual materials were recovered from either the postmolds or the pit nor did the alignment and position of the postmolds and pit form any pattern.



FIGURE 22. FEATURES AT AREA B, 9EB207.

Eastern Sector: No surface collection was conducted in the eastern sector of the site. Instead, a series of procedures was instituted which would allow for determination of the vertical and horizontal extent of the buried A horizon identified by TRC. The first procedure implemented in the sector was the placement of four initial 1 m by 1 m test pits, beginning in Area C and continuing east, with the placement of the remaining three test pits in TRC Areas D, E, and F. These four units were designated Test Pits 1 through 4, and each was excavated in arbitrary 10 cm levels (Figure 23).

The results of these initial test pits led to a modification of the data recovery program conducted in the eastern sector of the site. TRC had indicated that during their testing program, the buried A horizon had consistently appeared at a depth between 11 cm and 26 cm until Area F was reached, at which point the buried A appeared more deeply buried (53 cm). The NWR test pits, however, revealed a consistent expression of the buried A horizon between 14 cm and 27 cm below the surface from Area C to our plotting of TRC's Area F. The continued shallowness of the buried A horizon in Test Pits 1 through 4 led to a change in the originally proposed excavation strategy, one of extensive stripping of overburden, to a systematic interval sampling procedure. Additionally, in order to reconcile the problem of the stratigraphic change in the eastern half of Area A/1 (see preceding section) and the apparent shallow nature of the buried A horizon in the eastern sector of the site, fifteen backhoe trenches were placed across the site east to west, and south of the road (Figure 19).

The results of the backhoe procedure are graphically displayed on Figures 24 through 27. From the backhoe results, it was apparent that the appearance of the buried A horizon at the site is restricted to the eastern sector and that due to topographic anomalies, even within a short horizontal distance its relative depth from surface can change significantly. The implications of the stratigraphy at the site will be addressed further in this site discussion.

The systematic sampling program followed the grid established during the surface collection in the western sector. These grid lines were continued into the eastern sector of the site. A west-east baseline was established along the N160 line. Thirteen 1 m by 1 m test pits were placed at 20 m intervals along the line, and offset north or south alternately by 10 m from it. The systematic placement of test pits began at N170/E660 and ended at N170/E900. Originally, a fourteenth pit was to have been placed at N149/E920; however, one of the backhoe trenches was placed in that vicinity so the excavation unit was moved to N149/E922. A fifteenth test pit was judgmentally placed west of Test Pit 1 and N170/E660 at co-ordinates N149/E570. The last test pit, a 1 m by 2 m unit, was placed adjacent and to the south of 207BH8 in order to investigate two buried A horizons which appeared in that trench. All 16 of the test units were excavated by natural strata.

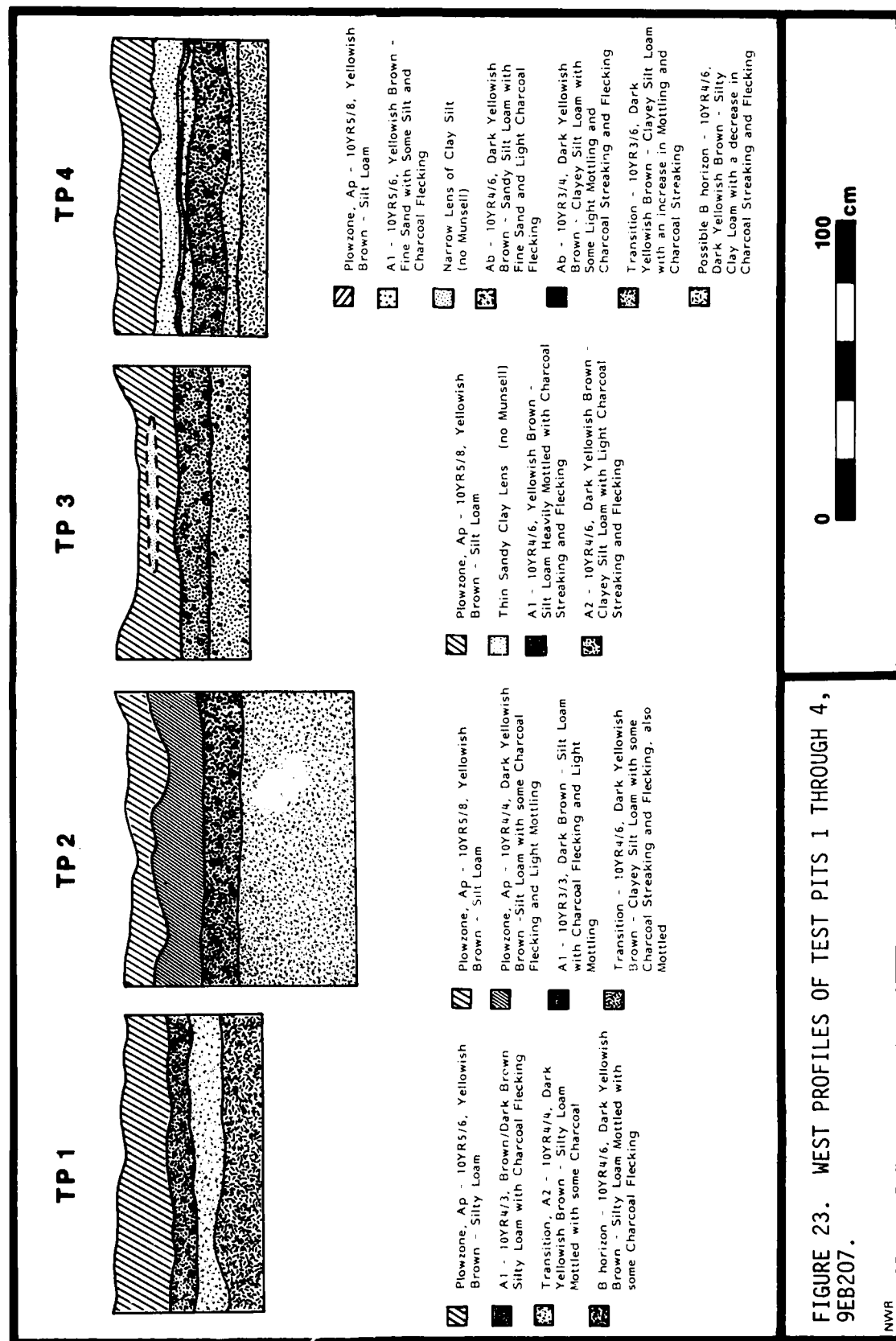
















FIGURE 23. WEST PROFILES OF TEST PITS 1 THROUGH 4, 9EB207.

NWR

LEGEND

-  Loam
-  Sand
-  Gravel and sand
-  Alternating sandier and finer-grained layers
-  Remnant of A₁ below plow zone
-  Buried A₁
-  Silty clay loam to clay loam with brown/tan/red mottling down to brown, red, and gray mottling. Gray becomes dominant at depth.
-  Silt loam to silty clay loam to clay loam, various layers with faint mottling, roots, iron manganese nodules, etc.
-  Burrow and/or root matting
-  Iron Manganese nodules
-  Artifact
-  Sharp color and/or texture change
-  Slight color and/or texture change
-  Transitional color and/or texture change

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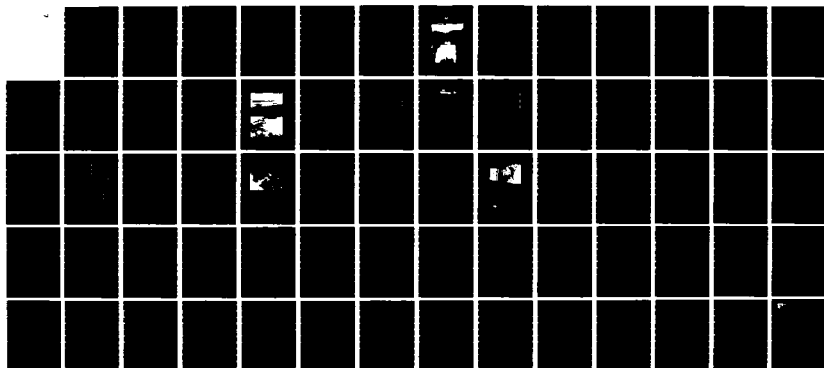
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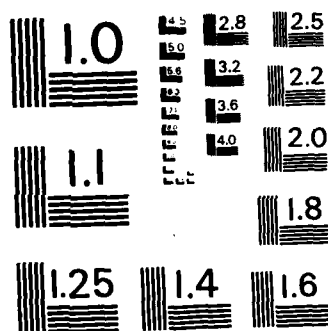
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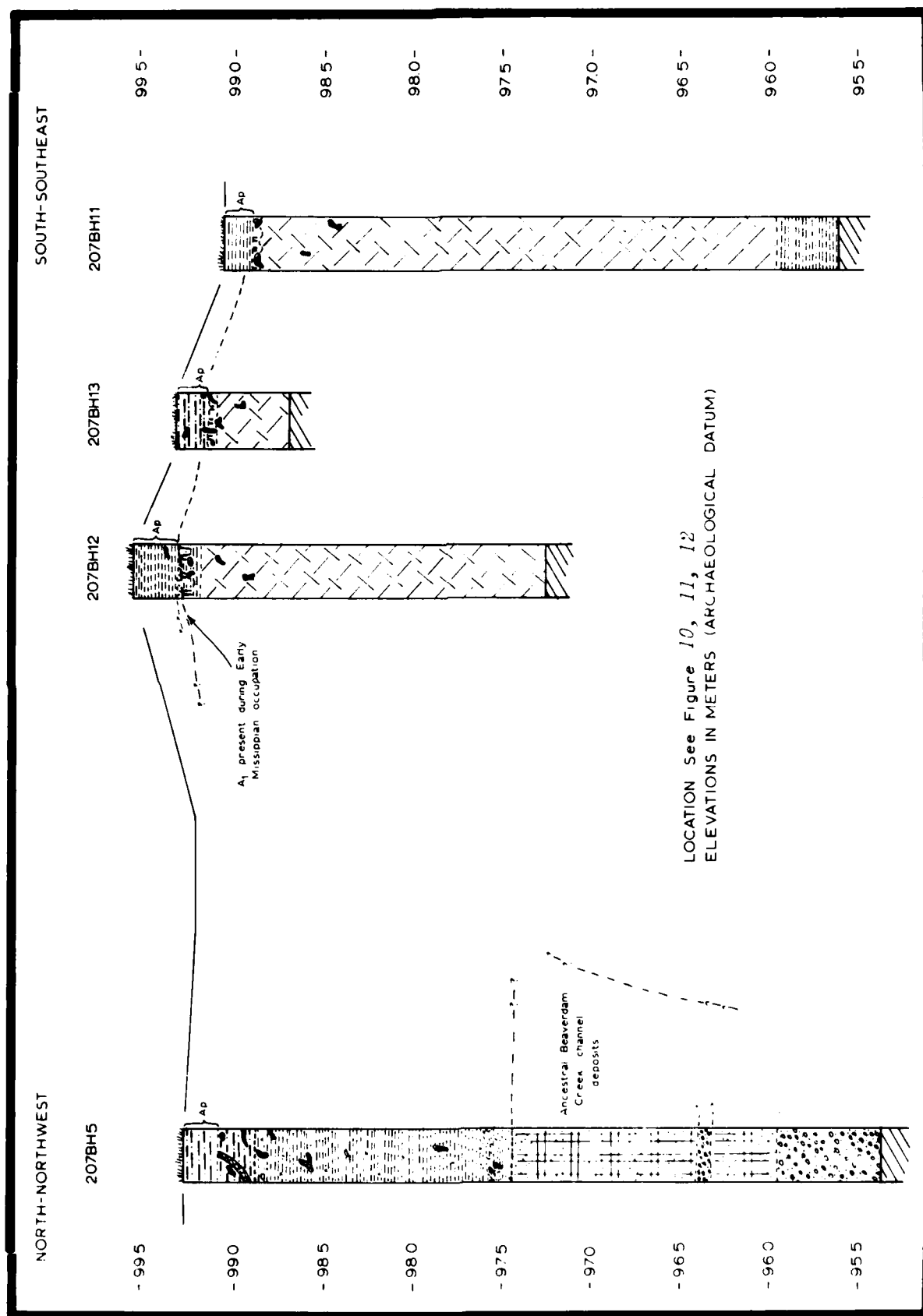


FIGURE 24. PROFILES OF BACKHOE TRENCHES 5, 11, 12 and 13 EXCAVATED AT 9EB207.

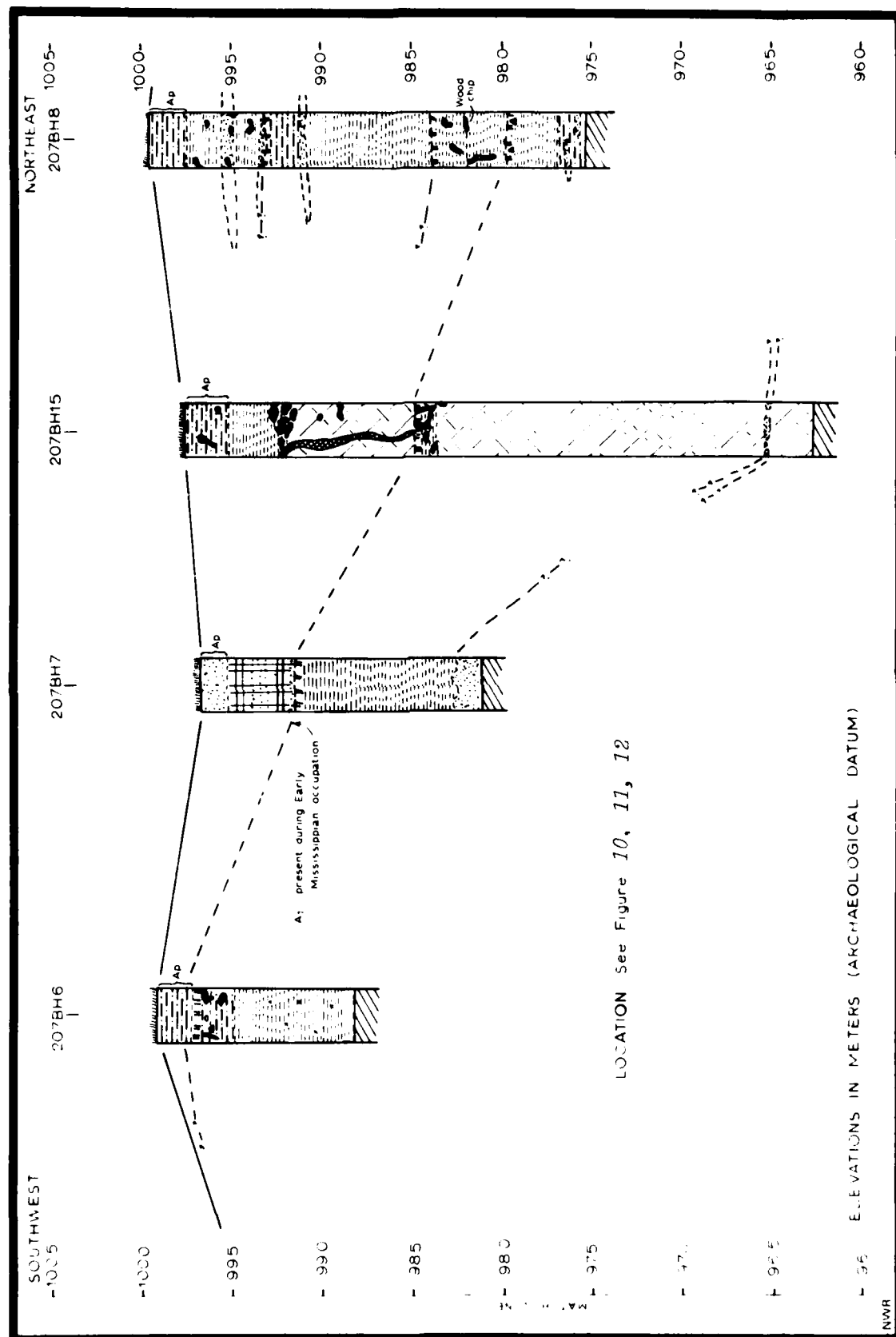


FIGURE 25. PROFILES OF BACKHOE TRENCHES 6, 7, 8 AND 15 EXCAVATED AT 9EB207.

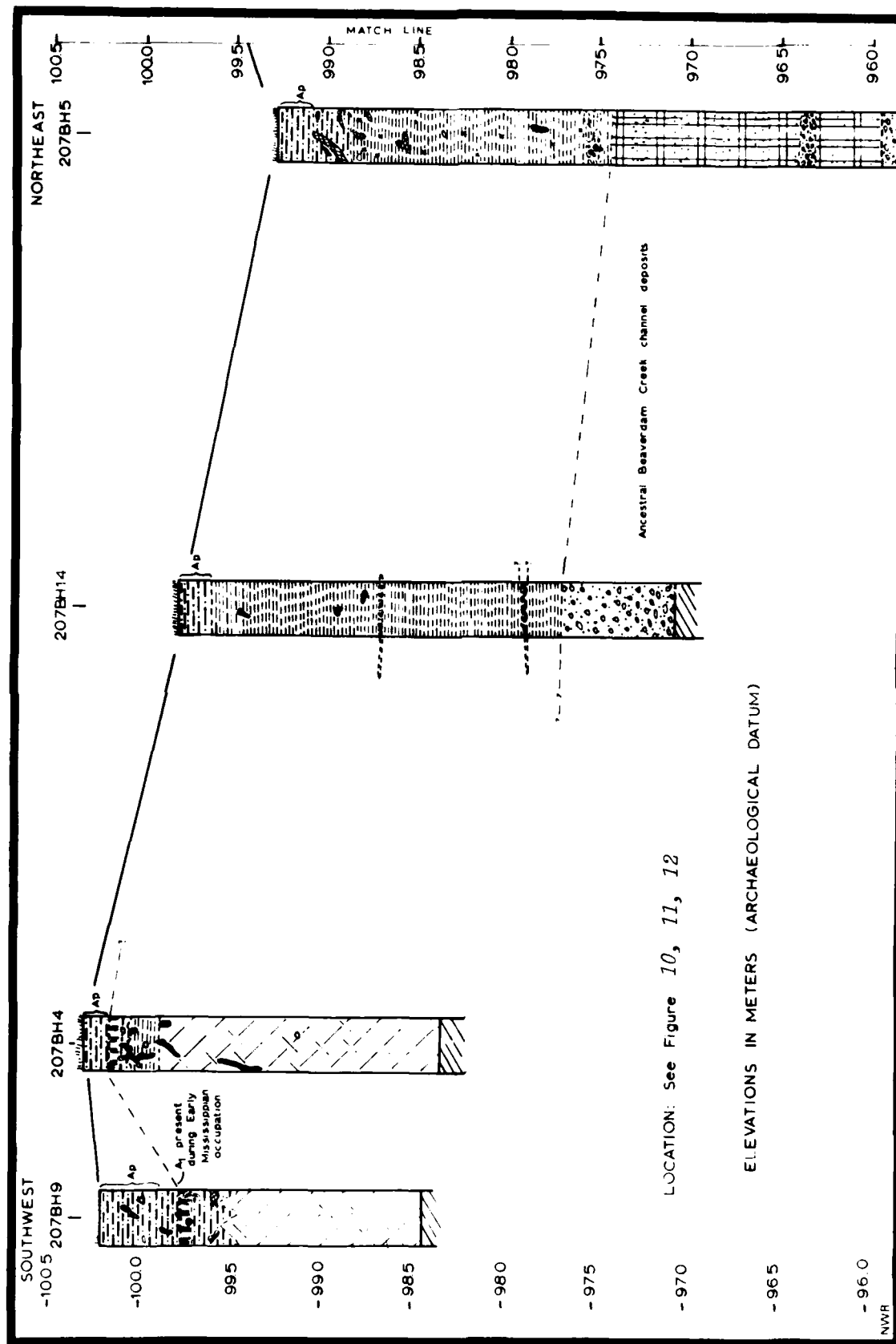


FIGURE 26. PROFILES OF BACKHOE TRENCHES 4, 5, 9 and 14 EXCAVATED AT 9EB207.

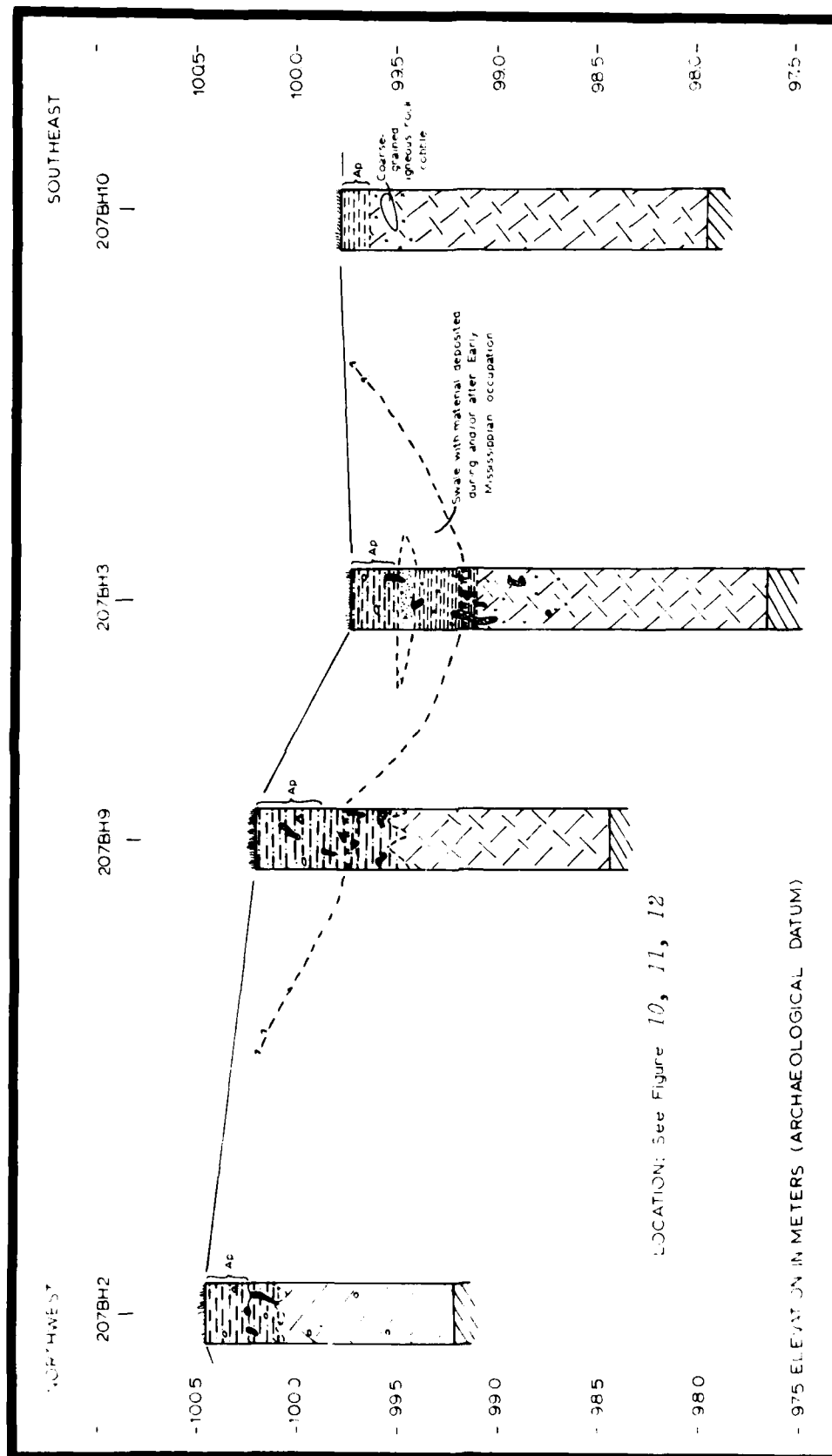


FIGURE 27. PROFILES OF BACKHOE TRENCHES 1, 3, 9 and 10 EXCAVATED AT 9EB207.

NWR

Two units, N170/E700, located east of 207BH14, and Test Pit 5, located south of 207BH8, will be treated in more detail, following a general discussion of the excavation results. Based upon those results, the initial appearance of the buried A horizon increases in depth from 14 cm to a maximum of 32 to 34 cm, west to east across the site. As the depth of the buried A horizon increases, it tends to decrease in width, and is overlain by one or more depositional episodes, probably flood related (Figure 28). As will be more fully discussed, the majority of artifactual material occurs above or within the buried A horizons. Only two units, N149/E720 and N149/E570, did not have a buried A horizon.

Although all the units produced artifactual material, there was a concentration of materials in the units between N170/E660 and N170/E760. This area roughly corresponds to TRC Areas D and E. The apparent concentration of occupation in this locality is partially substantiated by the presence of three postmolds (Postmolds 4, 5, and 6) defined at the base of Stratum 2 in N170/E700 (Figure 29). No artifactual materials were found in direct association with the postmolds, and no other features or postmolds were defined in the excavation of the remainder of the units.

In the case of Test Pit 5, the unit as noted above had been placed to investigate two deeply buried A horizons, the initial appearance of which occurred at 1.66 m below present ground surface. The initial 1.5 m of overburden was removed by a backhoe, and the oversized unit was laid north-south. The increase in size was to ensure stability of the walls, as the water table had been encountered in 207BH8 at approximately 2.2 m. Two well-defined buried A horizons were horizontally exposed, and both of the buried A horizons, which are separated from one another by indistinct flooding episodes (Figure 25) produced ceramics. The ceramics, though small and eroded, would appear to date the horizon to the Savannah II, but the assignation must be considered tentative. The fact that the buried A horizons slope upward to the south and west points to the contemporaneity of the buried A horizon in Test Pit 5 and the shallower A horizons present toward the middle portion of the site; this is also confirmed by the artifactual data.

Artifact Analysis

The artifact assemblage from 9EB207 was the smallest of any site in the Beaverdam Group (Tables 8 and 9). A total of 519 items, 263 ceramics and 256 chipped stone and groundstone, were recovered in the course of the work. Only 16 (6.1 percent) of the ceramics were decorated, and of that number only four could be typed. The lithic assemblage likewise produced five projectile points, only one of which could be identified. The vast majority (88.2 percent) of the lithics were flakes or debris, with only 11.7 percent of the collection classified as tools. Despite the small size of the overall assemblage and the limited number of diagnostics, it was possible to tentatively date one component at the site to the Savannah II period.



FIGURE 28. BACKHOE TRENCH 7, 9EB207 (note flood lenses).



FIGURE 29. POSTMOLDS AND ROOT IN N170/E700 AFTER EXCAVATION, 9EB207.

TABLE 8. SITE 9EB207 - GENERAL CERAMIC SUMMARY (Continued)

	N170/ E820 II**	N151/ E830 II**	N149/ E840 mixed	N170/ E860**			N149/ E880**			N170/ E900 VI**	TEST PIT 5**				GENERAL SURFACE			GENERAL	TOTAL
				I	II	III	IV	I	III	IV	III	IX	X	XI	N100/ E560	N160/ E590	N130/ E620		
Plain																			
Rim																		1	2
Bowl																			4
Jar																			1
Neck																			
Bowl																			
Jar																			1
Body	2	3	1	1	1	1	2	1			5	1	2			1	1	4	172
Decorated																			
Rim																			
Node																			
Folded																			
Applique																			
Incised																			
Body																			
Simple																			
linear																			
angular																			
Check																			
square																			
Savannah-like																			5
Impressed																			1
Savannah-like																			1
Cordmark																			2
Rect. C.S.																			1
Curv. C.S.																			
Brushed																			
Other																			
Dec. eroded																			6
Crumbs																			67
Subtotal All	2	3	1	1	2	2	2	1	1	2	5	1	4	1	1	1	1	5	263

TABLE 9. CHIPPED STONE AND GROUNDSTONE ASSEMBLAGE RECOVERED FROM 9EB207.

Excavation Unit	N149/E570	N147/E600		N170/E600	N170/E660			N149/E680		N170/E700				N149/E720	
Level	1	2	5	1	1	2	3	1	2	1	2	3	4	1	2
<u>FLAKES</u>															
unmodified-															
whole	1			1						1					
fragments	5	4	1	1	4		5			1	1	2		2	1
modified-															
whole															
fragments							1					1			
Subtotal-flakes	6	4	1	2	4		6			1	2	3		2	1
<u>CHIPPED STONE</u>															
unifacial tools															
backed scraper															
flake graver															
bifacial tools															
roughout															
fragment					1			1		1					
backed scraper															
punch/awl					1										
points															
unidentified															
leaf-shaped															
med.& narrow															
Subtotal-tools					2			1		1					
<u>OTHER</u>															
debris	10			1	1	2		1		2	2			1	4
cores															
<u>GROUNDSTONE</u>															
net sinker							1								
abrader															
GRAND TOTAL	16	4	1	3	6	1	9	1	1	1	3	5	2	3	5

TABLE 9. CHIPPED STONE ASSEMBLAGE RECOVERED FROM 9EB207 (Continued)

Excavation Unit	N149/E760		N170/E780				N149/E800	N151/E830	N149/E840	N170/E860		N149/E880
Level	1	2	1	2	3*	4	1	5	1	2	3	5
<u>FLAKES</u>												
unmodified- whole fragments		2	1	2				1	3 10	1	3	
modified- whole fragments												
Subtotal-flakes		2	1	2				1	13	1	3	
<u>CHIPPED STONE</u>												
unifacial tools												
backed scraper												
flake graver												
bifacial tools												
roughout												
fragment		2										
backed scraper												
punch/awl												
points												
unidentified												
leaf-shaped												
med.& narrow												
Subtotal-tools		2										
<u>OTHER</u>												
debris		3	1	1	2	1	1					3
cores												
<u>GROUNDSTONE</u>												
netsinker												
abrader												
GRAND TOTAL	2	5	1	2	4	1	1	1	13	1	3	3

* Flotation Sample

TABLE 9. CHIPPED STONE ASSEMBLAGE RECOVERED FROM 9EB207 (Continued)

Excavation Unit	N149/E922	N163/E721	N170/E740	TP3	TP5					Systematic				
Level	3	2	3	1	5	4	1	3	6	8	10	Collection	Other	TOTAL
<u>FLAKES</u>														
unmodified-														
whole							1	1	1				3	23
fragments				2	1		1			1			1	88
modified-														
whole														1
fragments				1								3		6
Subtotal-flakes				3	1		2	1	1	1		50	4	118
<u>CHIPPED STONE</u>														
unifacial tools														
backed scraper												1		1
flake graver												1	1	2
bifacial tools														
roughout												1	1	2
fragment						1						2	1	9
backed scraper												3		3
punch/awl														1
points														
unidentified												2	2	4
leaf-shaped													1	1
med & narrow														
Subtotal-tools						1						10	6	23
<u>OTHER</u>														
debris	2	1	1		1						1	66	1	108
cores											1	3		4
<u>GROUNDSTONE</u>														
net sinker													1	2
abrader												1		1
GRAND TOTAL	2	1	1	3	2	1	2	1	1	1	1	130	12	256

As discussed in the Previous Investigations section, work by Taylor and Smith (1978) had indicated the presence of a Middle Archaic component in addition to Woodland and possibly Mississippian occupations. TRC's work refined the identification of the latter occupations to Early Woodland and Lamar components. The Early Woodland occupation was based on the presence of Dunlap Fabric Impressed sherds, while the Lamar was identified primarily from diagnostic rim forms.

The extremely low total of diagnostic sherds recovered by NWR did little to clarify the occupational sequence at the site. The identified ceramics are all types typical of Savannah II, and the plainwares include burnished pieces, also typical of that period. We identified no Early Woodland or Lamar types so the only evidence of these components is based on previous collections.

The lithic assemblage is dominated by the use of quartz (82 percent) with minor presence of several other stone types. Chert is present only in the form of flakes and debris which implies that flaking of chert cores was done at the site. However, no chert cores or tools were recovered. This apparent incongruity may be explained if the chert was brought to the site as flakes, for use as tools. Gross edge modifications indicating such uses were not evident on the flakes. The 17 pieces of fine-grained igneous material are of questionable cultural origin since such material should, if flaked, exhibit attributes which would result in at least a few identifiable flakes.

Bifacial tools compose 86.9 percent of the unifacial and bifacial tool assemblage and of this percentage, projectile points represent 25 percent. Four of these are unidentified as to type; one is a Leaf-shaped Narrow and Medium, identified by Wauchope (1966:113) as probably of Early Woodland affiliation. This point was recovered in a general surface collection and thus is not helpful for identifying and dating a specific area of occupation. The tools in the assemblage are distributed very thinly over the site with only two areas which perhaps tend to have a higher occurrence of tools. These are units N170/E660 and N149/E760, but the density of these unit samples is too low to permit further inferences.

Site Interpretations

In order to understand fully the results of the various procedures conducted at the site, prior to a more in-depth discussion of the cultural sequence, a short discussion of the stratigraphy is necessary.

On the basis of the stratigraphic data supplied by the 15 backhoe trenches and the 20 archaeological test pits, it is possible to form a basic, though still incomplete picture of the structure and material of the terraces. The terrace, alluvial in origin, has developed, as noted in the site setting discussion, at the confluence of Beaverdam

Creek and the Savannah River. Much of the terrace is relatively old alluvium on which a Wickham series soil has developed (United States Department of Agriculture 1969, Sheet 65). A thin wedge of more recent Beaverdam Creek sands and loams covers much of the northwestern half of the triangular terrace. This wedge is more than 50 cm thick along the northwestern side of the terrace, and becomes thinner to the southeast. It is locally not present over rise crests. The wedge appears to pinch out southeast of the road in trenches 207BH11, 207BH12 and 207BH13. The terrace edge is probably formed on recent Savannah River deposits on the Savannah River side of the terrace.

The northeastern end of the terrace is, however, stratigraphically complex. A buried cut-bank lies somewhere between trenches 207BH7 and 207BH8, and between 207BH15 and 207BH8. The northwestern tip of the terrace, at 207BH8, contains a 2.5 m thick section of relatively recent Beaverdam Creek/Savannah River, stratified sands and loams. This section contains a relict A₁ horizon at approximately 1.66 m below the terrace surface, and possibly another one, 20 cm deeper. The presence of the Mississippian period ceramics in shallower, A₁ horizons near the middle of the site would indicate that the Beaverdam Creek depositional episodes which built the terrace eastward, and which partially covered the old surface with overbank sands, were at least in part synchronous.

This brief review of the results of the geomorphic studies at the site allows for further interpretations of the cultural materials recovered. In the western sector of the site, deflation has eradicated the upper deposits, leaving only a thin plowzone and underlying B horizon. This at least partially accounts for the low artifactual return from other than surface contexts in the area. Although a possible buried A horizon was noted in the vicinity of Area A/1, and postmolds and a pit were identified in Area B, there were no associated diagnostics to date the features. TRC did, however, point to a possible Dunlap Fabric Impressed defined Early Woodland component in Area B, but our data can add nothing in support of their suggestion.

The highest concentration of artifactual material occurs in the central portion of the site, encompassing Areas C and D, and probably including the western half of Area E, none of which had surface artifact manifestations. In this area of the site the buried A horizon, apparently undisturbed, routinely appears at between 14 and 18 cm below ground surface and averages 12 cm in thickness. It is also in this area that postmolds were defined at the A/B horizon interface. Artifactual materials recovered by TRC in this central portion point to possible early Lamar occupation, a conclusion based primarily on the presence of slightly excurvate and folded rims. However, the few decorated sherds recovered by NWR from the area, primarily over stamped check-stamped and irregular line-shape incised indicate only a general Mississippian occupation (Wauchope 1966; Hally 1970).

Further to the east, in the vicinity of TRC Area F, the occurrence of buried A horizons in 26/bH15, N149/E922 and N170/E900 support the presence of artifact-bearing buried horizons east and north of TRC's Area F. The continuation of both A₁ horizons and artifacts further east is confirmed by the excavations in Test Pit 5. In Levels 3, 9, 10 and 11 which correspond to the upper buried A and the upper portion of the lower buried A, a total of seven ceramics was recovered. In Level 3, the single sherd was a plain body piece, while in levels 9, 10 and 11 six sherds, represented by two plain, one check-stamped, one rectilinear complicated stamped, and one net-impressed, were recovered. The composition of this assemblage would point to a possible Savannah II affiliation for the second buried A horizon.

If this is indeed the case, the strong possibility exists for the definition of an occupation which may encompass both Savannah II and Lamar components. We must emphasize, however, that the limited number of ceramics inhibits conclusive statements as to temporal assignation, and the possibility exists that the central and eastern sections of the site are a single temporal entity, representative of a cultural transition between Savannah II and early Lamar.

9EB208

Site Setting

Site 9EB208 covers a portion of a gently-sloping upland ridge nose which rises from the south bank of Beaverdam Creek. The central part of the site is approximately 450 m south of the creek. The ridge nose extends northeastward down to a shallow depression which separates it from the alluvial terrace on which site 9EB207 is located (Figure 30). The site covers the lower portion of the ridge nose, from approximately 123.4 m ASL to approximately 120.4 m ASL.

The extent of this site is poorly understood, since the previous investigations (Taylor and Smith 1978) were confined to an open area that has been under cultivation for at least the past 40 years (Phillip Wansley, personal communication 1980). In addition, much of the surficial soil has been removed for landfill, so the original form of the surface is unknown. The earth-moving operations have heavily disturbed the site and cultivation has impacted peripheral areas, as evidenced by relict furrows present in wooded areas.

Despite the disturbances, the general characteristics of the landforms, soils, and parent materials can be determined. The axis of the ridge nose rises in elevation from approximately 1.5 m (6 m above present Beaverdam Creek low water) southwestward to nearly 8 m (12.5 m above present Beaverdam Creek) near the up-slope limit of the site. Slopes are steepest on the northern side of the nose, where quartz outcrops are locally present.

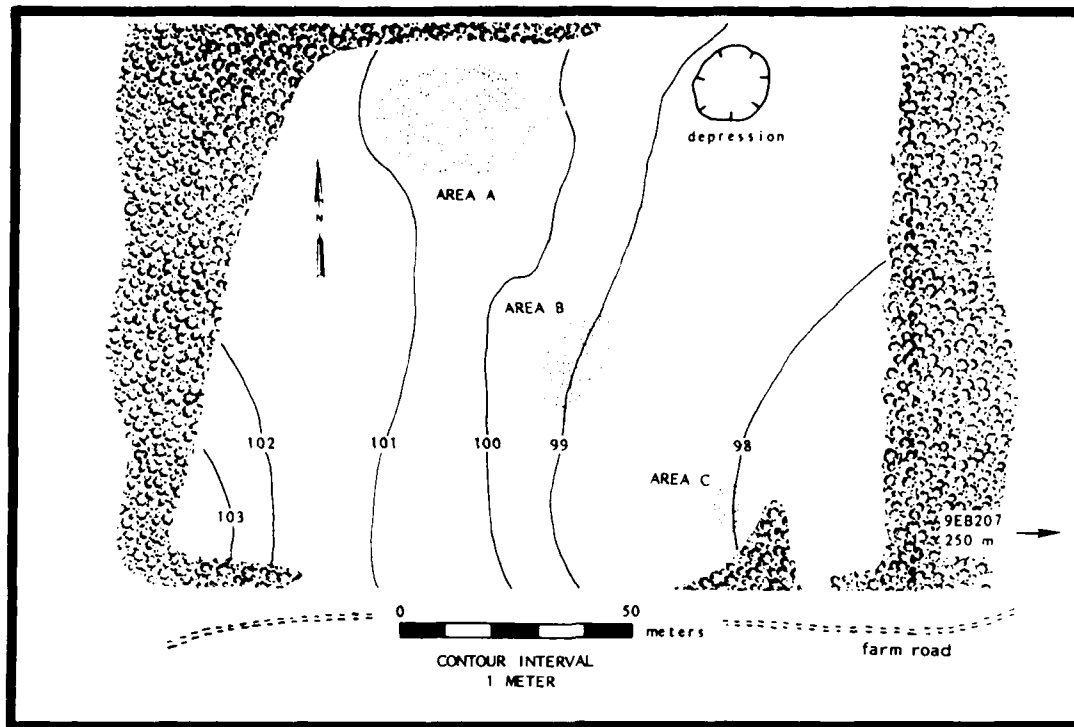


FIGURE 30. CONTOUR MAP OF 9EB208 SHOWING AREAS A THROUGH C.

Wickham sandy loam is mapped over the ridge nose which contains the site (United States Department of Agriculture 1969:Plate 65). This soil is formed on well-drained, rarely flooded, alluvium in terraces higher than the Toccoa soils found at site 9EB219. It is evident that the ridge nose represents a small remnant of the valley-margin portion of an old Beaverdam Creek floodplain. Quartz bedrock is thinly covered and locally crops out on steeper slopes toward the creek.

Previous Investigations

This site was reported by Taylor and Smith (1978). At the time of their investigations, 9EB208 was in cultivation and offered good surface visibility. The site was divided into three "proveniences" and all visible material collected. The site was reported to be about 125 m by 200 m in size, apparently corresponding to the cultivated field.

In addition to the surface collection, a series of shovel tests was excavated to assess the vertical depth of materials. The subsurface testing revealed artifactual material to lie no deeper than 20 cm below the surface and to be restricted to the plowzone.

Taylor and Smith (1978) interpreted 9EB208 as one of only seven quarry sites located in their survey. They made this assignment on the basis of a quartz outcrop present on the site and an extremely high density of lithic debris, predominantly quartz.

Among the artifacts collected during their work were 74 hafted bifaces, 17 other bifaces, two chunks with bifacial retouch, and 23 other flakes. Also present were chunks, five hammerstones, and several examples of unquantified exotic lithics. Diagnostic projectile points include the types Hardaway, Palmer, Kirk Stemmed Serrated, Morrow Mountain I and II, Guilford, Halifax, Savannah River, Duncan, Adena, and Yadkin. The majority of points were produced from quartz (78 percent), with the types Savannah River, Yadkin, Adena, and Kirk Stemmed representing the only incidence of use of raw materials other than quartz.

Although the lithic artifacts formed the overwhelming majority of cultural materials, Taylor and Smith (1978) also reported ceramics from the surface collections. The ceramic collection of 75 specimens contains predominantly plainware; however, those diagnostic wares that were identified point to an Early Mississippian affiliation.

This site was not among those selected for additional testing under a contract with TRC. In August, 1980, however, TRC archaeologist William Barse visited the site, which was being impacted by Elbert County soil removal operations. Portions of the site had been freshly bulldozed, exposing numerous stains that he suggested might represent cultural features. Barse contacted IAS, who contracted with NWR to conduct immediate investigations of the site in conjunction with our work at the three nearby sites in the Beaverdam Group.

Research Issues

Formal research questions were not originally raised for this site since it was added to our investigations as a contract modification while in the field. At that time, a review of Taylor and Smith's (1978) work was made to provide background information (TRC did not test this site).

Our research was consequently aimed at isolating structural features and determining their age in addition to delineating the nature and extent of activity at the site during the prehistoric periods. Special attention was focused on evaluating the site as a possible quarry or, perhaps, a tool manufacturing area.

Current Investigations

Following verbal authorization, it was agreed that three areas, arbitrarily designated as Areas A, B, and C (Figure 30), would be shovel skimmed and troweled to facilitate delineation of the possible features and postmolds (Figures 31 and 32). Since the bulldozing had removed the topsoil at this site, the B horizon was extremely compacted due to exposure and vehicular traffic. Therefore, a sprinkling system was used prior to excavation to facilitate shovel skimming in all three areas. In conjunction with the shovel skimming, mapping operations were begun at the site. A benchmark was established in Area B and given an arbitrary elevation of 100 m ASL.



FIGURE 31. ELBERT COUNTY SOIL REMOVAL OPERATIONS AT 9EB208. (Note flagged stains are in Area B.)

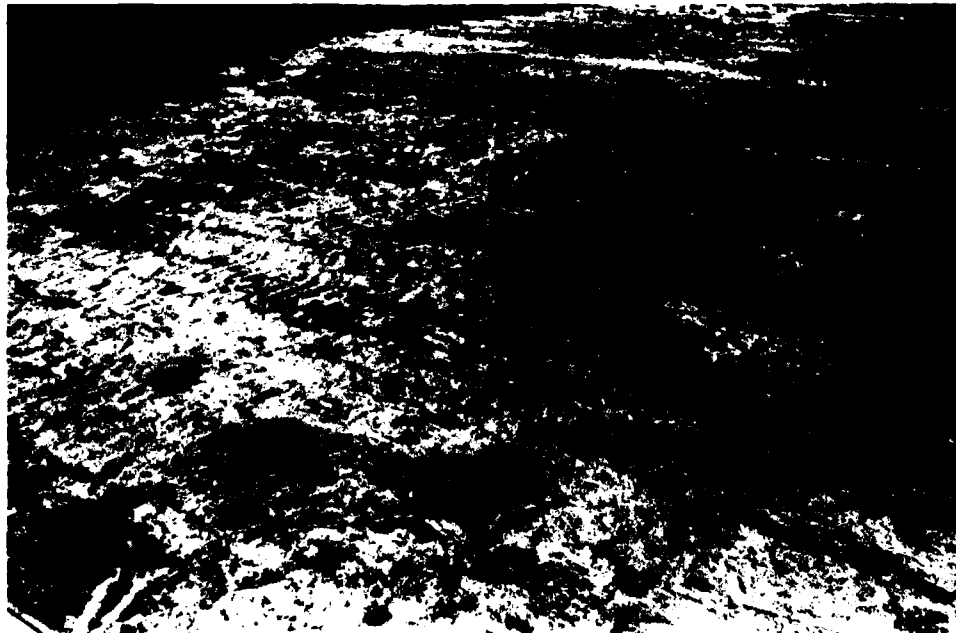


FIGURE 32. POSTMOLD PATTERN IN AREA A, 9EB208.

Shovel skimming was conducted in all areas. In Area A, troweling was also required to delineate the stains. A total of 167 possible features were identified: 76 in Area A; 62 in Area B; and 29 in Area C.

The majority of the stains appeared on the basis of size as possible postmolds and few of these were large enough to cross-section. Consequently, these stains were excavated as single units. If, upon excavation, the stain proved to be a root or animal burrow, the fill was waterscreened through 1/4 in mesh for artifact recovery and backfilled. The fill from confirmed postmolds, however, was removed as a single provenience for flotation.

Only four stains were of sufficient diameter to permit cross-sectioning. Of these, only one proved to be cultural (the remaining three were roots): one section was removed as a single provenience and the other half was excavated by natural levels.

Of the original total of 76 stains in Area A, 26 were confirmed postmolds and one was a pit (Feature 2) that appears to have been used for cooking (Figure 32 and 33). The majority of postmolds were located in the western end of Area A and appear to form a semicircle approximately 7 m in diameter. Although a partial circular structure pattern is suggested by the arrangement of posts, it is complicated by isolated postmolds that do not conform to a circular arrangement. It is possible these may represent modification, different stages of construction, exterior supports of an unknown function, or part of another structure.

Feature 2 (Figures 33 and 34) was situated just east and outside of the semicircular structure pattern and west of a group of three postmolds. It appeared as an amorphous stain on the surface that was oriented roughly north-south. In the upper stratum, the fill was a dark reddish-brown (5YR3/4) silt loam that contained a small pocket of dark ash (10YR4/3). Immediately underlying the ash layer and pocketed in the silt loam was a small area of fired yellowish red (5YR5/6) clay.

Small quantities of charcoal were observed in the profile in two areas: the first beneath the fired clay and the second to the south near the southern edge of the pit. Fired clay mixed with dirt was also observed overlying the southern charcoal concentration. Beneath the northern charcoal concentration was another lens of ash. The basic silt loam fill began to darken to a dark reddish-brown (5YR3/4) near the base of the pit and although we were able to stratigraphically excavate the distinct areas such as the ash lens and fired clay area, it was not possible to isolate the lowest stratum of silty clay loam from the general silt loam fill since the color differentiation was gradational. As a result, the lower portions of the pit beneath Stratum 3 were taken out as a single provenience.

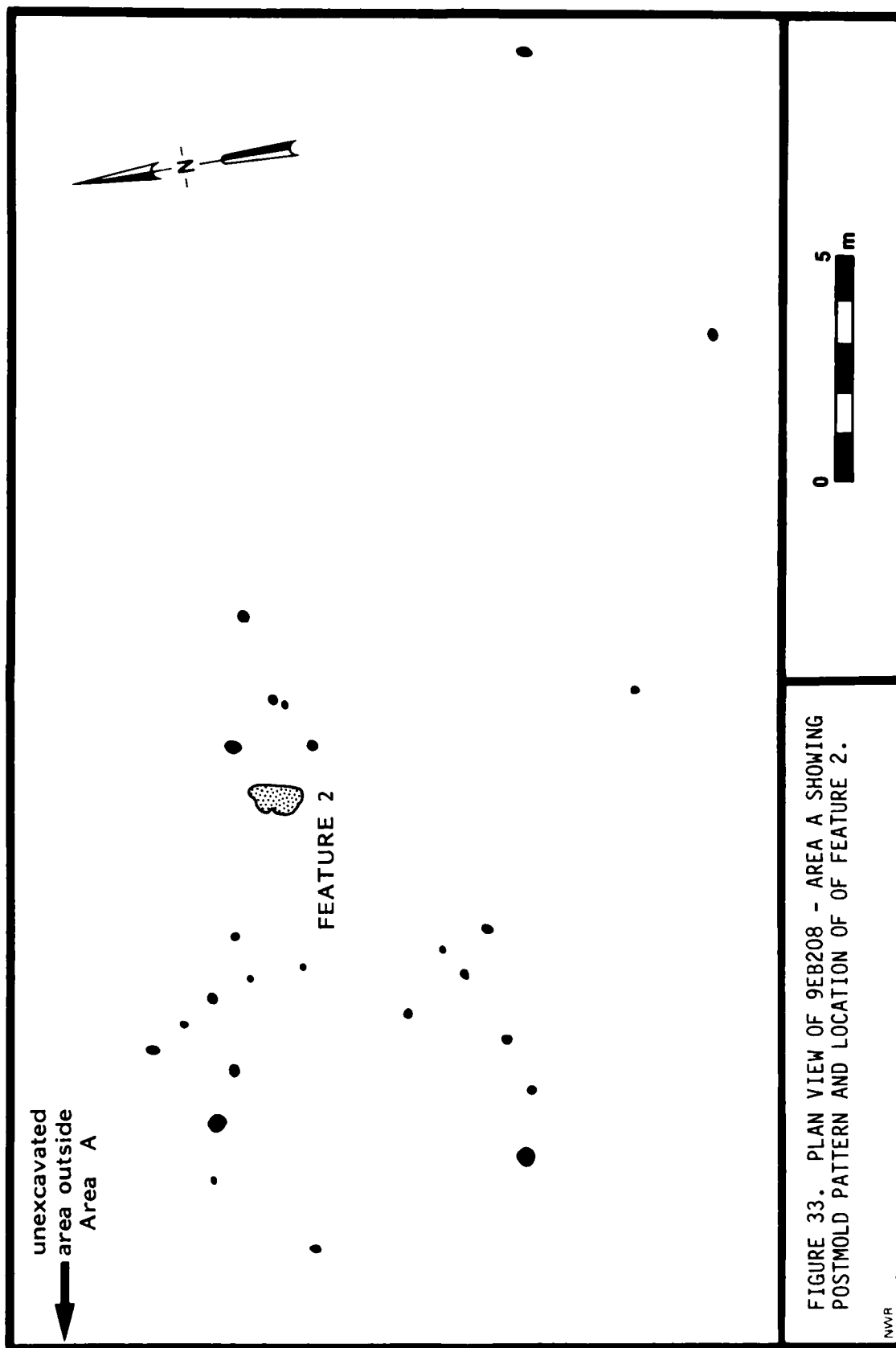


FIGURE 33. PLAN VIEW OF 9EB208 - AREA A SHOWING POSTMOLD PATTERN AND LOCATION OF OF FEATURE 2.

NWR

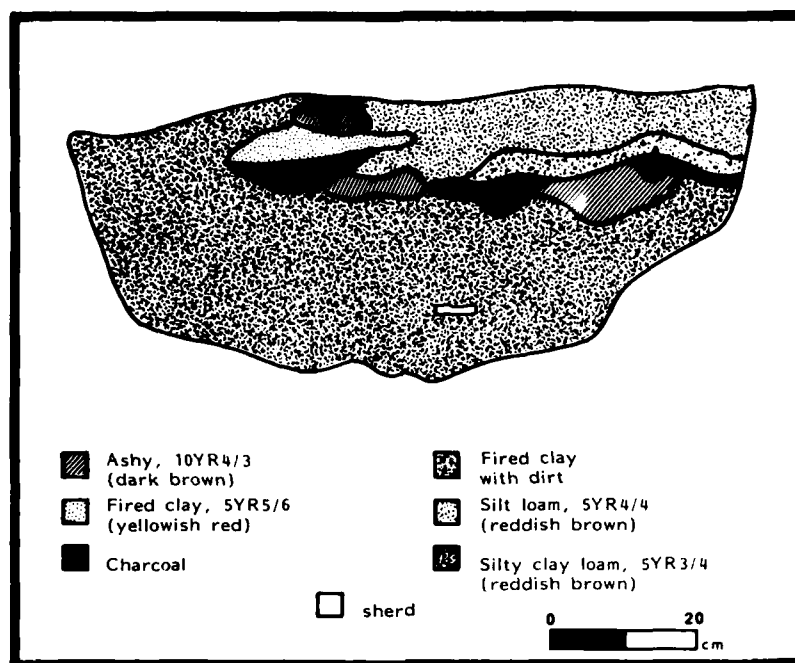


FIGURE 34. PROFILE OF FEATURE 2, AREA A, 9EB208.

Baked clay was found in portions of the feature walls, principally in the southern half of the pit. In that area, underlying the charcoal concentration, the pit formed a small "cul-de-sac" that intruded under the unexcavated B horizon surrounding the southern half of the pit. No stain was present on the surface in this area so it appears that the pit had been extended during its period of utilization. Thirteen sherds and a minor quantity of charcoal were found in this area, although no evidence of bone was present.

The function of the pit was probably for food preparation since it contained ash lenses and charcoal. The subtle stratification of ash may indicate that it was re-used several times. We do not know if a relationship exists between this pit and the three postmolds directly to the east. It is conceivable that if it was a cooking pit, the posts represented some type of windbreak.

The amount of time required for shovel skimming, troweling, and excavation of 76 stains in Area A quickly reduced the time remaining for excavation in Areas B and C. During excavations in Area C (Figure 35) a decision was reached between IAS and Savannah District Corps of Engineers that no additional funds would be requisitioned for 9EB208 at that time. As a result, we concentrated our efforts on the investigation of as much of the remaining areas as possible.

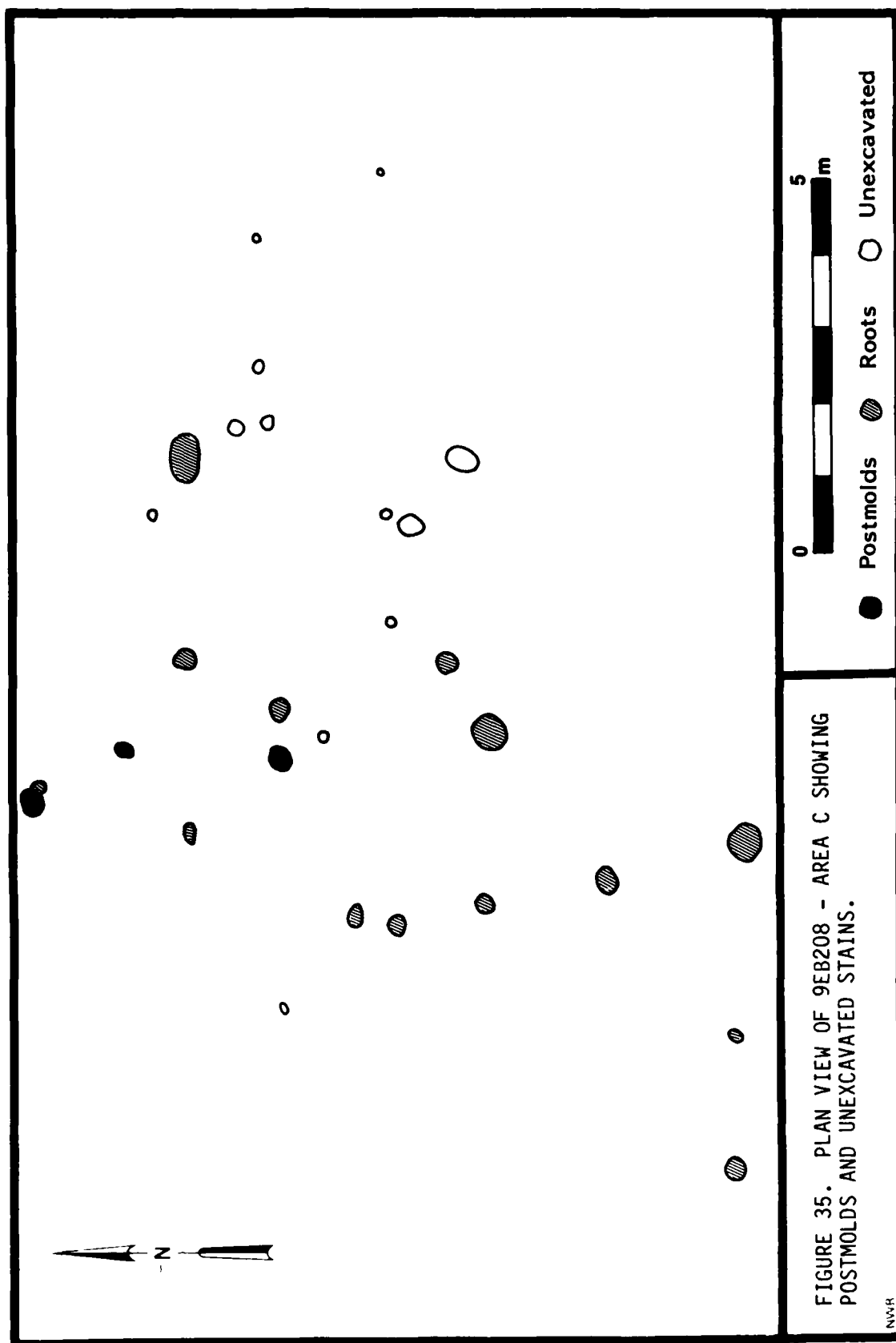


FIGURE 35. PLAN VIEW OF 9EB208 - AREA C SHOWING POSTMOLDS AND UNEXCAVATED STAINS.

NWR

In Area C, the excavation of 17 out of 29 stains yielded evidence of only three postmolds (Figure 35). Although they were generally aligned, they formed no discernable pattern. The other stains that were excavated proved to be either tap roots or general root disturbance. The remaining 12 stains could not be excavated due to lack of time, but each was probed and determined to most likely be the remains of tap roots.

In Area B, no excavations were undertaken due to the shortage of time. All stains were mapped and surface measurements taken. An attempt was made to determine if there was any clue as to cultural association from surface appearance and configuration of stains. Based on the results of Area A, we found no way to determine with confidence whether a stain was cultural or natural from surface configurations alone.

Artifact Analysis

Our investigations at 9EB208 produced a small ceramic collection and a larger but less temporally diagnostic lithic assemblage (Tables 10 and 11). Of the 121 ceramics recovered, 44 were too small to permit analysis. The remaining 71 included only 27 sherds that were decorated. Likewise, while the lithic collection was comprised of 822 items, 84 percent of that total were unmodified tertiary flake fragments or debris. Only two identifiable projectile points, a Stemmed Triangular, Shield Shape (Wauchope 1966) and a Morrow Mountain I were recovered, and both points were from a general surface context in Area A.

The decorated ceramic assemblage (Table 10) recovered during the 1980 season is similar to that reported by Taylor and Smith (1978:Appendix C). Five of the decorated sherds recovered by NWR could be typed. Two Savannah Net-Imprinted, one Savannah Complicated Stamped, and two Savannah-like Check Stamped were identified, in addition to untyped rectilinear and curvilinear complicated stamped sherds. The plain sherd paste/temper analysis, utilizing descriptively similar categories to those used by Taylor and Smith (1978:286), produced almost identical breakdowns. Sixty-nine percent of the plain sherds fell in Category II, fine sand temper with minimal inclusions, while in Categories III and IV, 28.5 percent and 2.3 percent of the plain sherds were represented.

A similar comparison cannot be made with the lithic collections (Table 11) gathered from the two investigation stages. The Taylor and Smith collection, while not more extensive, included a far greater number of diagnostic projectile points indicative of a long temporal utilization of the site. The diagnostic projectile points recovered during the 1980 investigation would point to a Middle Archaic and Early Woodland occupation, a broad temporal framework. The temporal span and significance of the six unidentified projectile points is unknown.

TABLE 10. SITE 9EB208 - GENERAL CERAMIC SUMMARY

	GENERAL SURFACE		GENERAL SURFACE		AREA A					SUBSURFACE CONTEXTS		TOTAL
	A	B	AREAS OTHER THAN A, B, C		PM. 52	PM. 55	PM. 62	PM. 2	Feat. 3	Area A	Area C	
Plain Rim	1		3									4
Bowl	1											1
Jar	13	5	5							2		36
Body						3	1	6	1			
Other,	1											1
Worked sherd												
Bottom		1										1
Decorated Rim												
Folded												1
Applique	1											1
Body												
Simple Stamped linear										1		1
Check Stamped square	1r				3							4
Savannah Net-Impressed												2
Etowah C.S.									2			1
Rect. C.S.	1		1						1			3
Savannah C.S.	1					1		2				4
Brushed						1						1
Other												
Dec. eroded	4		1					4	1			10
Crumbs	50											50
Totals	72	8	10		3	5	1	16	3	2	1	121

NOTE: the use of the letter 'r' indicates a rim sherd.

TABLE 11. CHIPPED STONE ASSEMBLAGE RECOVERED FROM 9EB208.

	Gen. Surf. A	Gen. Surf. B	Gen. Surf. C	Gen. Surf. Other	Post Molds Area A	Fea- ture No. 2	Sub- Surface C	TOTALS
<u>FLAKES</u>								
unmodified- whole	8	18	2	32	4	2		66
fragment	44	130	2	230	19	4	9	438
modified- fragment	3	2	1	2	1			9
Subtotal - flakes	55	150	5	264	24	6	9	513
<u>CHIPPED STONE</u>								
unifacial								
graver	1							1
awl	1							1
backed scraper		1						1
bifacial								
backed scraper	1			1				2
graver		1						1
discoidal biface				1				1
roughout				1				1
fragment	1		1	12				14
points								
unidentified	2	1		1	1		1	6
shield-shaped	1							1
medium-small								
Morrow Mt. 1	1							1
fragments	1	3		12				16
Subtotal - tools	9	6	1	28	1		1	46
<u>OTHER</u>								
debris	28	28		157	9	2	28	252
cores	2			4				6
hammerstone	1			2				3
Subtotal - other	31	28		163	9	2	28	261
GRAND TOTAL	95	184	6	456	34	8	38	820

The lithic collection is characterized as a predominantly (93.3 percent) flake and debris assemblage with a low percentage (5.6 percent) of unifacial and bifacial tools. This low ratio of tools to flakes implies a relative importance of lithic processing and tool manufacturing at the site. Materials used in manufacturing are predominantly quartz (84.7 percent), with small percentages of other stone types. All stone types are of local origin except the four pieces of chert.

Use of specific stone types for particular tool classes is not clearly evident except that all three backed scrapers are made from quartz. The chert is in the form of both tools and flakes, implying that it was imported in bulk form and reduced locally. However, the initial reduction was probably not done at this site since little debris was found. Alternatively, there may have been a special initial chert reduction area at the site not located by our investigations. Use of fine-grained granitic materials for tools is restricted to bifaces. Three biface fragments of this material are accompanied by debris and flakes, which indicates manufacturing was being done at the site. The reason for this restriction to only one tool form is not known. The soapstone pieces are all classified as debris. It is likely that many of these debris pieces are actually flakes but since a grainy stone material does not fracture conchoidally, the distinctive flake morphology does not develop and thus, they are not classifiable as flakes although they are technologically analogous.

The function of the site seems heavily oriented toward lithic processing, particularly of bifaces. The 43 bifaces comprise 93.5 percent of the unifacial and bifacial tool class. Eight bifaces (18.6 percent) were identifiable as projectile points. This percentage (18.6) is not comparable to the percentage of projectile points reported by Taylor and Smith (1978:389; 47.7 percent) for the site; however, the collection techniques were not comparable. The presence of the broken bifaces and flakes/debris is congruous with a lithic workshop function but finished tools indicate other activities occurred. These other activities are of an unspecified nature but probably included a variety of craft/subsistence tasks, primarily in Area A.

Site Interpretations

The areas investigated by NWR at 9EB208 were heavily disturbed by soil removal operations. Still, our excavation at the site produced information on the prehistoric occupation, specifically the Mississippian period.

While the dating of the site is broad (see preceding section), and indicates occupations from the Early Archaic through the Mississippian periods, the investigations conducted in the western section of Area A revealed the presence of a possible structural outline and one probable cooking pit. Diagnostics from the pit and one of the posts (Postmold 52) in the semicircular pattern date to

the Savannah II period. Two Savannah Net Impressed sherds and one Savannah Complicated Stamped sherd, were recovered from Feature 2, while two check stamped sherds came from Postmold 52 within the possible structural pattern. These data may suggest some of the post-molds and the pit are contemporaneous, but this is obviously offered as a tentative suggestion.

With regard to the site having served as a quarry, no one area yielded the type of lithic collection that would indicate it was used specifically for tool production or served as a quarry. Quartz artifacts were scattered over the entire area investigated, and continued in adjacent wooded or grass covered areas that were not focused upon in our work. Taylor and Smith (1978) noted this site as being significant because of its designation as a possible quarry. The situation we observed was that the area had been utilized in prehistory for chipping activities, but whether actual on-site outcrops were the source of raw materials is unknown due to the considerable disturbance and artifact displacement.

In interpreting occupation at 9EB208, it is critical to point out the limited nature of current and previous work. Taylor and Smith's (1978) investigations represented only survey and our work, though structured for Phase I data recovery, was biased because of the type of approach. It would have been preferable to consider this level of effort as a testing stage; however, the immediate nature of soil removal disturbance obviated that alternative. Consequently, we do not know the actual site extent or whether the disturbed area we were excavating represents a core area or is on the periphery of the actual site. Since Taylor and Smith (1978) appear to have confined their work to the cultivated field, no systematic inspection of the wooded areas has been made. The interpretations drawn from the present work must, therefore, be viewed in terms of these problems.

9EB219

Physical Setting

9EB219 is located on a relatively flat-topped terrace between the Beaverdam Creek floodplain and the upland hills (Figure 36). Toward the creek the edge of the terrace is approximately marked by the 395 ft (102.4 m) contour. Between the terrace edge and the floodplain the slope is moderately steep to gentle (less than 15 percent). At the base of the slope is a series of shallow swales up to six meters broad and about 40 cm below the surrounding floodplain of Beaverdam Creek.

North of the terrace, the floodplain slopes very gently north and east to Beaverdam Creek. To the west, a degraded cut-bank leads down to the bottom of an intermittent stream which flows roughly north from the uplands to Beaverdam Creek. This stream was inactive during our fieldwork (August), but the bottomland is clearly evidenced by dense

grasses and water-tolerant tree species, especially water oak. TRC (Gardner and Barse 1980) reported the site to be bounded on the east by a low, swampy area. The swamp is located approximately 250 m east of TRC's Test Pit 8. Although it is not shown on either of the available topographic maps (Corps of Engineers 1968, Sheet 4-C; United States Geological Survey 1964) the swampy area east of the terrace is densely vegetated with grasses. As with the intermittent stream, the swamp was dry at the time of our work, but it generally holds standing water.

As Figure 36 illustrates, the terrace surface comprises an elongated depression at the base of the upland, and a low ridge between that depression and the terrace edge. Between the depression and the broad ridge crest the maximum elevation difference is slightly more than one meter. Test pits dug by both TRC and NWR (see below) show that the site is confined to the broad crest above the 395 ft contour, in Toccoa fine sandy loam.

The Toccoa fine sandy loam is apparently present both on the terrace surface and on the adjacent floodplain (United States Department of Agriculture 1979, Sheets 65 and 66). Backhoe trench 219BH1, in the edge of the terrace (see Figure 36 for location) exposed a section which resembles the described Toccoa soil, except for being siltier. Sedimentologically, the deposits are stratified floodplain alluvium. At the transition from the lower terrace slope to the swale in the floodplain, trench 219BH2 exposed similar stratified floodplain deposits that correspond to the Toccoa series description (United States Department of Agriculture 1969:45).

The soils, terrace surface, and vegetation at the site have been disturbed in historic times. Portions of the site were logged several years ago and are now heavily overgrown with brush. Also, the site was cultivated approximately 20 years ago and plow furrows are still evident. TRC (Gardner and Barse 1980) reported that machinery disturbance stemming from timbering operations were confined to the upper few centimeters of the soil. However, when the survey transects were cleared, it became evident that the disturbance was greater than had been reported.

Upper portions of the soils are heavily disturbed, but at least part of an original A₁ horizon is preserved over part of the site. Where it is present, this zone is found below a plowzone (A_p horizon) with no intervening, undisturbed, flood deposits. Because of the plowing and timbering disturbances, it is not possible to determine from the test pit data whether this A₁ horizon was ever buried below overbank deposits of Beaverdam Creek subsequent to the prehistoric occupations. Before historic disturbance, the soil could have contained a wedge-shaped A₁ horizon, thicker at the slightly lower, northern edge of the terrace, and thinner toward the crest. In addition to disturbances noted above, surface disturbance includes several dirt piles on the periphery of the site. These probably date from recent logging.

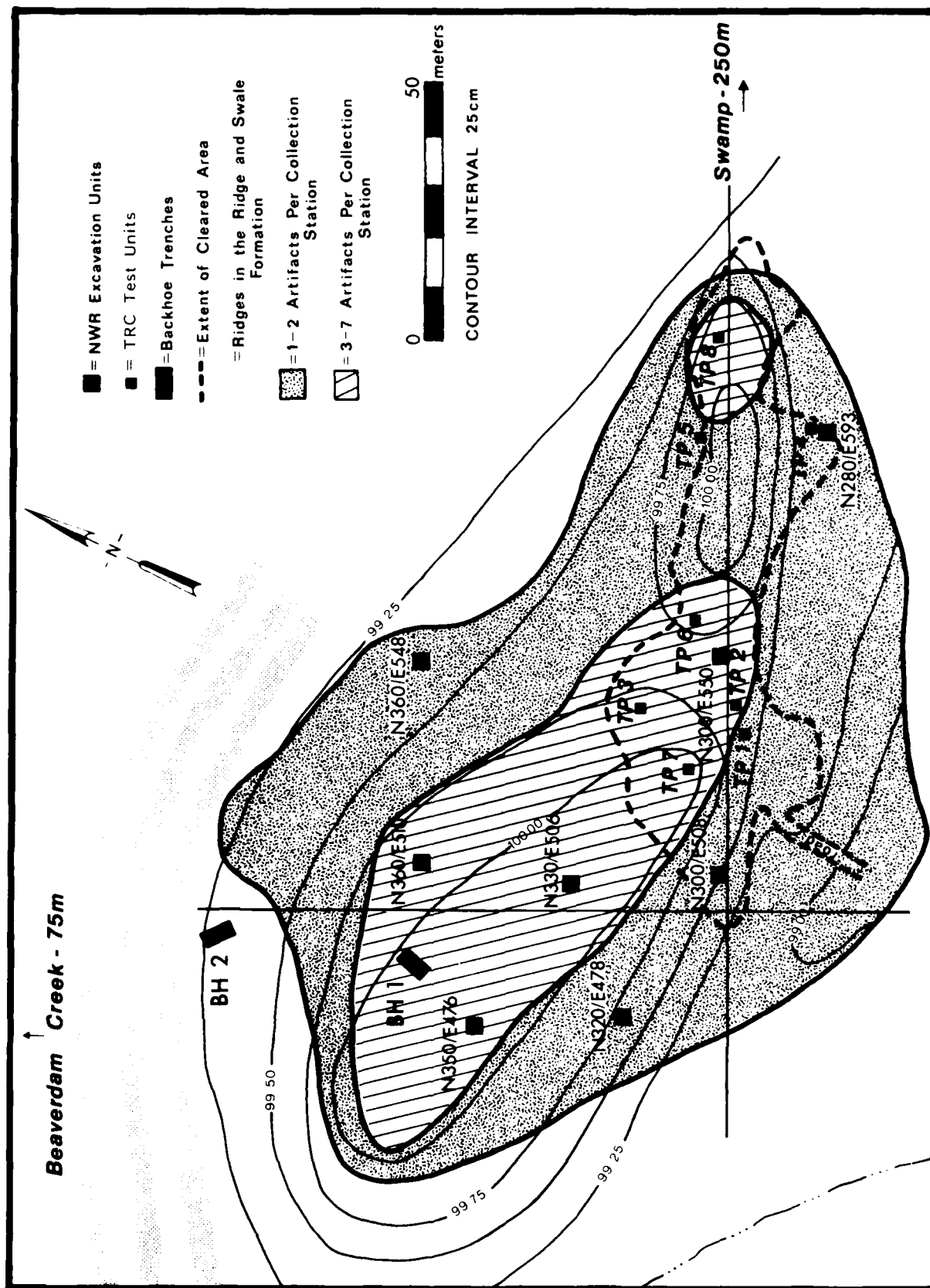


FIGURE 36. CONTOUR MAP OF 9EB219 SHOWING SURFACE ARTIFACT DENSITY AND TRC AND NWR EXCAVATION UNITS.

Previous Investigations

Site 9EB219 was first recorded by Taylor and Smith (1978). They reported the site encompassed 11,250 m², and consisted of a surface scatter with artifacts occurring at depths to about 20 cm. Twenty-six lithics were recovered during the survey, and, of that total, three hafted bifaces (not identified as to type in Taylor and Smith 1978:Appendix C), one hammerstone, and 22 flakes or chunks were represented. The ceramic collection included two decorated sherds, one example each of untyped simple stamped and untyped curvilinear complicated stamped. The remainder were all plain, and depending upon which appendix is reviewed, the total of sherds collected is either six or eight. The discrepancy in counts probably results from either sherd breakage or two crumbs or very small sherds being tabulated in one place and omitted in the other.

Based on these data, the site was classed as having components of the Middle and Late Archaic periods, and a prehistoric ceramic occupation dating to the Woodland and/or Mississippian periods.

Subsequent to the work of Taylor and Smith (1978), TRC relocated and tested 9EB219 (Gardner and Barse 1980). Those investigations included the excavation of six 1 m squares (1-6) and two 50 cm squares (7-8). The test pits were located judgmentally throughout the estimated site area. All were situated on the terrace, with Squares 3, 5, and 8 located near the terrace edge, and Squares 1, 2, 4, 6, and 7 situated to the south (Figure 36).

The TRC excavations revealed two basic profiles at the site. Both profiles have a thin humus layer underlain by a plowzone. The basic difference between the profiles is the presence of a buried A horizon, which was encountered in Squares 3, 6 and 7. Underlying the A horizon in these units was an A₂ or E horizon that terminated at about 34 cm (Square 3) where B horizon soils were encountered. In the units where an A horizon was not present, the horizon was underlain by two strata, an E or B, followed by a B horizon. As discussed above, it does not appear that sterile alluvial deposits have actually buried an A horizon. Rather the profile indicates an A₁ horizon directly overlain by an A_p zone.

Artifactual material derived from the TRC testing program suggested the presence of two components. The earlier, a Late Archaic Stallings component, was represented by two small fiber-tempered and punctate decorated ceramics, one possible sand- and fiber-tempered plain sherd, Savannah River points, and soapstone sherds. The later component was identified by the presence of three Etowah Complicated Stamped sherds, one of which was from a postmold in Square 4 that also yielded a ceramic gaming disc and three excurve plain rim sherds. On that basis the component was classed as Mature Mississippian. While the excurve rims are more typical in late Savannah II and Lamar, Etowah Complicated is usually considered indicative of the

Early Mississippian (Wauchope 1966). Therefore, the Mississippian occupation may be earlier than indicated by Gardner and Barse (1980).

Two postmolds were found during the TRC testing program. One was a large postmold in Square 4 that was mentioned above as yielding Etowah sherds. This suggests the presence of structural remains associated with the later component. A smaller postmold was also noted in Square 5, but we have no additional information on fill or associated artifacts. In addition to the postmolds, a basin shaped feature was found in Square 2; however, it lacked diagnostic artifacts.

Gardner and Barse (1980) considered the presence or absence of the A₁ horizon to be potentially significant in determining horizontal differences between the earlier and later components. Elaborating on this idea, they noted that Stallings materials seem more heavily represented in areas of the site which lacked the A horizon.

Research Issues

The TRC work conducted at the site confirmed an Etowah component and suggested a possible Stallings occupation. However, neither the stratigraphic relationship, nor the lateral extent of either was firmly established by the TRC testing program.

Stallings manifestations at this site, like others in the RBR project area (38AB288), would represent one of the most northerly occurrences of that cultural entity identified. The importance then of defining the nature of the Stallings occupation at 9EB219 is critical to understanding the northern, inland expression of that manifestation. In addition, we anticipated evidence might be located on the possible subsistence pattern shifts from the Late Archaic/Early Woodland transition.

The significance of an Etowah component must be viewed in relationship to the previously identified Savannah II components in the nearby area. Beaverdam Creek Mound (9EB85) is located about 2 km east of the site, and though work has indicated the possible presence of an Etowah occupation at that site (based on the occurrence of rectilinear complicated stamped) it dates primarily to the Savannah II period. Although Sears (1950) indicates that the RBR project area falls both within his Angular and Curvilinear Complicated Stamped areas, the dominant ceramic decorative modes for the Mississippian have been curvilinear, as evidenced by either Savannah or Lamar types. The presence of an Angular Stamped tradition component may help to clarify both the validity of Sears' (1950) differentiations and to determine whether or not there is temporal significance to the occurrence of the two traditions.

Current Investigations

When NWR initiated work at 9EB219 in August 1980, the site was heavily overgrown in secondary vegetation (Figure 37). Vehicular access to the site area was achieved by clearing an old logging road

with a bushhog, which, at the same time, cleared the central portion of the site. A light bulldozer was also brought in to clear lines of sight in areas of heavy vegetation to facilitate the linear transect survey (Figure 37). At that time a benchmark, set in a concrete block, was established near the center of the site and given an arbitrary elevation of 100 m ASL.



FIGURE 37. 9EB219 DURING CLEARING TO PROVIDE LINES OF SIGHT.

A grid system was laid out during the bushhog operations and oriented 25 degrees west of magnetic North. The bulldozed lines of sight followed the established grid system and were spaced at ten-meter intervals. Two baselines were laid out with the transit and staked at regular ten-meter intervals. All subsequent grid points were located by compass bearings and tape measurements off the two baselines. Designation of any point along the grid system was determined by the distance north and east from an arbitrary 0/0 starting point. Thus the coordinate for an excavation unit might be N300/E508, which would be the location of the southwest corner of that unit within the grid system.

The survey, designed to determine the horizontal extent of the site, was accomplished according to the basic procedure outlined in Chapter Four; however, since this site was so heavily overgrown, shovel tests were necessitated in lieu of surface collection. Artifacts were recovered with varying frequency throughout the area investigated by TRC, but our survey data also revealed the site continued further

north and west than previously indicated (Figure 36). Other than in the immediate vicinity of TRC's Squares 3, 6, and 7, the highest frequency of artifacts from the survey was located well away from the area of previous testing. The shovel testing program also revealed an interesting correlation between artifact density and TRC's location of the A₁ horizon. Their Squares 3, 6, and 7 all produced an A₁ horizon and they are the northern and westernmost units of the previous excavations. Since the artifact density from our survey remained high continuing north and west from those units, we were interested in determining if the occurrence of high percentages of artifacts correlated with the continuation in those directions of the preserved A₁ zone. This possibility dictated the placement of units excavated during Phase I data recovery.

A total of eight 2 m by 2 m excavation units was placed at the site (Figure 36). Six of these were located in the previously uninvestigated northern and western portions of the site. Three units (N300/E508, N330/E506, N360/E510) were placed specifically to investigate an artifact concentration along the E510 line. Two units (N320/E478 and N350/E476) were situated to test the western edge of the site and to explore the high artifact concentration around N350/E480 and the smaller concentration around N320/E480. The sixth unit (N360/E548) was placed near the terrace edge to determine the extent of occupation toward the northeast.

The two remaining excavation units were placed in the vicinity of TRC's squares in order to address specific questions generated by their work. One unit (N300/E550) was located between TRC's Squares 2 and 6 since an A₁ horizon was found in the latter and not in the former though the squares are separated by only about 20 m. The final excavation unit (N280/E593) was placed near TRC's Square 4 in which a large postmold had been located.

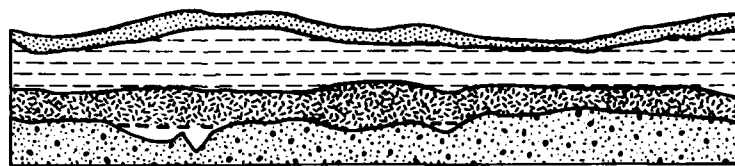
In addition to the conventional excavations, two backhoe trenches were placed to provide stratigraphic information on the extreme northern end of the site (Figure 36). These have been briefly discussed in the physical site setting.

Hand excavation at this site was hampered because of extremely dry soils which also made it difficult to observe stratigraphic changes. Although excavation by natural levels was the preferred method, it was impossible to maintain proper control given these problems. Consequently, arbitrary 10 cm levels were excavated. The dirt from each level was waterscreened through 1/4 in hardware mesh, except for a 15 cm square control block which was left in the southwest corner and taken for screening through 1/16 in mesh.






The stratigraphic situation revealed by our excavations corresponds with TRC's data. As with their work, two basic profiles were observed, which were differentiated by the presence or absence of the A₁ horizon (Figure 38).

N360 E510

WEST PROFILE



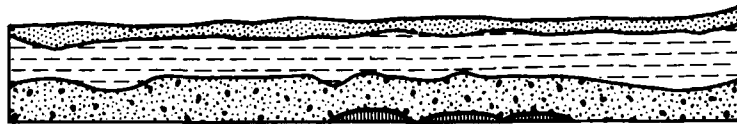
0 100
cm

-  Humus
-  Old plowzone, Ap, 10YR6/6, brownish yellow - silt loam
-  A1 horizon, 10YR4/3, brown - silt loam
-  Transition, 10YR5/4, yellowish brown - silt loam
-  Root

Note - B Horizon present in floor of excavation unit but does not appear in profile.

N280 E593

WEST PROFILE



0 100
cm





-  Humus
-  Old plowzone, Ap, 10YR5/6, yellowish brown - silt loam
-  Transition, 10YR3/3, dark brown - silt loam
-  B horizon, 10YR5/6, yellowish brown - silt loam

FIGURE 38. WEST PROFILE OF N360/E510, SHOWING PRESENCE OF A₁ HORIZON, AND WEST PROFILE OF N280/E593, SHOWING ABSENCE OF A₁ HORIZON.

Although there was disturbance in each pit resulting from roots, plowing and animal burrows, the A₁ stratum does not appear to have been heavily disturbed. This horizon was present in three of our excavation units and absent in the remaining five. When viewed in terms of horizontal distribution, the combined data from our project and previous testing by TRC provide an estimate of the extent of the A₁ horizon. It is clear that the A₁ stratum is concentrated in the central, northern and western areas of the site. It should be noted, however, that this stratum may not be continuous since in N330/E506 the A₁ horizon was present only as pockets and no definitive A₁ was found in N350/E476.

Three stained areas were designated as features. Feature 1 proved upon excavation to be a burned root rather than a cultural feature. Feature 2 was located in N330/E506 and consisted of a broken Etowah Complicated Stamped ceramic vessel with a rectilinear nested square design (Figures 39 and 40). The pieces of the vessel were nested inside each other at a depth of 16 cm below surface. Postmold 1, located about 10 cm east of the vessel, was approximately 24 cm in diameter and extended to a depth of 21 cm below the surface. The fill yielded charcoal and ceramics, which included four plain body sherds, one unidentifiable decorated rim, and one curvilinear complicated stamped sherd. Although the ceramics recovered from the postmold could not be typed to a described category, the presence of curvilinear complicated stamped motifs would indicate an association with the Savannah II occupation which is identified at the site.

The third feature (Postmold 2), was encountered in the same excavation unit as the vessel and Postmold 1. It was first encountered at a depth of 29 cm, and after excavation measured 10 cm in diameter and extended to a depth of only seven centimeters. Charcoal was found throughout the fill, suggesting the post may have been burned. Unfortunately, no ceramics or diagnostic lithics were found, so its chronological affiliation cannot be assigned.

All cultural features were found in the single excavation unit, N330/E506, in which the A₁ stratum was present. Although we had expected to find structural remains in N280/E593, deliberately placed adjacent to TRC's Square 4 which contained a large post, none were encountered by our excavations.

Artifact Analysis

9EB219 produced the greatest frequencies of all artifact classes recovered during investigations at the Beaverdam Group (Tables 12-14). The lithic assemblage is comprised of 5306 items, predominantly flakes and debris. Only 3.6 percent of the lithics are unifacial or bifacial tools. The ceramic collection includes 1953 sherds, 84.5 percent of which are plain or crumbs. Only 15.5 percent of the ceramics are decorated.

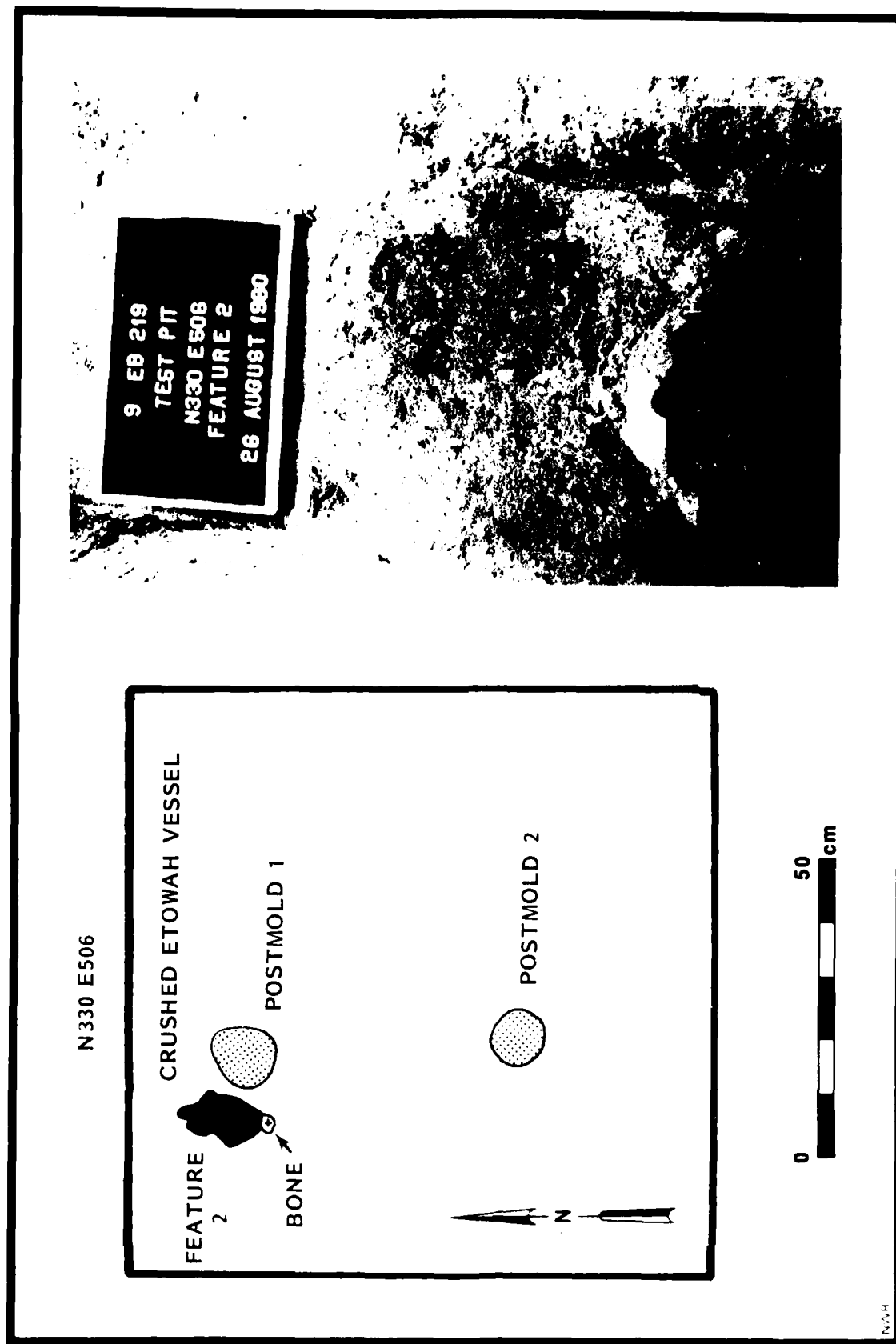


FIGURE 39. PLAN VIEW OF N330/E506 SHOWING LOCATION OF FEATURES.

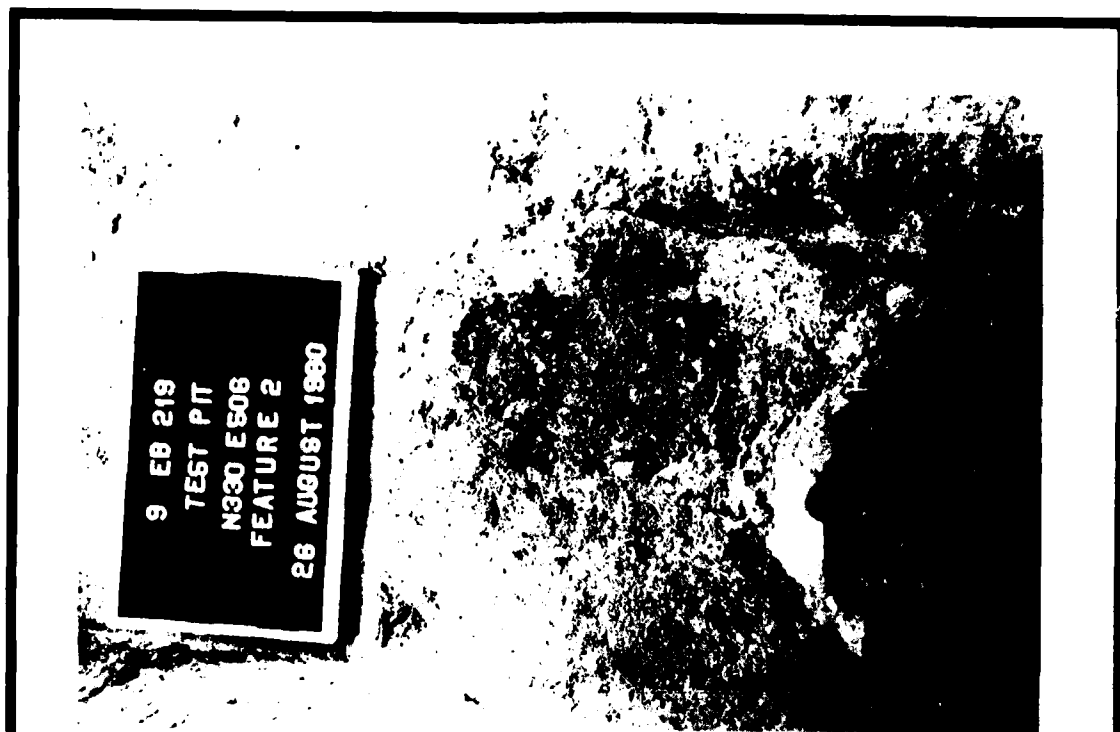


FIGURE 40. CRUSHED ETOWAH COMPLICATED STAMPED VESSEL IN FEATURE 2 AT 9EB219.

TABLE 12. SITE 9EB219 - GENERAL CERAMIC SUMMARY

Provenience	N360/ E510				N330/ E506 Feet				N300/ E508		N300/ E550		N350/ F476		N320/ E478				N360/ E548				N280/ E593			SURFACE COLLECTION	TOTAL	
Level	1	2	3	4	1	2	3	2	1	2	1	2	3	1	2	3	1	3	4	1	2	3	4	1	2	3	TRANSECTS	
Plain																												
Rim	1	8	1		5	2			2	1	2			2		1				3	5			1			2	36
Bowl	2	3			1	2	1		1							1				2	2			1				16
Jar	2				2	1			1																			6
Neck																												
Jar					1																					1		2
Body	31	101	10		54	100	1	4	42	15	11	5	1	56	14	28	19	6		12	28	22	31	24	52	10	677	
Other	1				2	1	1				1	1	1	1	1	1				1							9	
Decorated																												
Rim																												
Other		3						1			1																	7
Node	1						2															1	1					3
Folded	1																											2
Applique																											1	1
Incised	1						1																1		1			5
Body																												
Simple Stamped																												
Deptford-like	3	2			3	8			2	1		1					1											21
Deptford			2			1																						3
Check Stamped					1																							3
Deptford	2				1	2											2			1			1		1			8
Savannah-like	1																											1
Cordmarked	1													1	1													4
fine		8		1																					1			10
Dunlap Fabric-																												
Impressed	2	4			6	2	1							2	6	5	1									1		30
Net Impressed													1															1
Stallings Plain													1															1
Punctate	1																											2
Incised											1																	
Rect. C.S.	3		1		7	5	2							2			1			1	1					1		24
Etowah C.S.	2	1			5	2	2		1								1								1			15
Curv. C.S.	3				6	9		1				1		1			1								1			23
Savannah C.S.	3				2	3																2			1			12
Brushed																						1						1
Other	1																											
Painted																												
Handle					1																							1
Dec. eroded	5	13	2		13	20	5		4	3	1			8	4	8	3	1		7	3	15		5	6			127
Crumbs	68	125	7	3	124	129	11	0	13	0	41	32	0	29	11	25	43	13	1	0	57	41	66	18	30	0	16	903
Totals	122	281	22	5	228	294	27	6	66	20	56	40	3	100	33	70	76	21	1	12	100	76	119	51	92	1	34	1956

Table 13. CHIPPED STONE ASSEMBLAGE RECOVERED FROM 9EB219.

Excavation Unit	N360/E510				N330/E506					N300/E508			N300/E550			
Level	1	2	3	4	1	2	3	4	F2	1	2	3	1	2	2-3	3
FLAKES																
unmodified-																
whole	16	26	5		18	56	5	1		28	14		45	49	4	9
fragments	48	122	26	10	79	138	21	4	2	126	44		250	296	23	43
modified-																
whole	5		1		3	4	1			1	4		1			
fragments	2	3			2	4				1	4		1	3		
Subtotal - flakes	71	151	32	10	102	202	27	5	2	156	66		297	348	27	52
CHIPPED STONE																
unifacial																
fragments				1												
ovate scrapers																
discoidal scraper																
backed scraper																
scraper				1		1										
spokeshave																
bifacial																
roughout						1				2						
scraper																
discoidal scraper																
backed scraper	1	4	3			1										
backed chopper	1	1														
chopper-scraper	1															
hafted end scrap.	1															
discoidal biface				1	1								1			
ovate biface										1	1		1			
graver																
punch/awl			1							1						
knife				1												
adze																
fragments		1			2	1				2	3		4	3		
points																
quartz crude stem																
shield shaped	1									1			1			
leaf shaped																
Hardaway																
Yadkin					1											
Morrow Mt. 1														1		
Sm. Triangular		2				2				1		1				
Savannah River	1		2			1							1			
(reshaped)														1		
fragments	1	2	2	1	2	3		1	1	5	1		5	2	1	1
Subtotal - tools	7	10	8	5	6	10		1	1	13	5	1	13	7	1	1
OTHER																
debris	67	133	55	24	73	86	29	1	9	136	58	1	183	185	13	18
cores	2	2	1	3		2	1			3			4			
hammerstones		1			1					1			2			
Subtotal - other	69	136	56	27	74	88	30	1	9	140	58	1	189	185	13	18
GRAND TOTAL	147	297	96	42	182	300	57	7	12	309	129	2	499	540	41	71

Table 13. CHIPPED STONE ASSEMBLAGE RECOVERED FROM 9EB219 (Continued)

Excavation Unit	N350/E476				N320/E478				N360/E548				N280/E593			Systematic	TOTALS
Level	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	Collection	
FLAKES																	
unmodified																	
whole	42	16	20	1	34		24	1	2	2	2	11	18	36	17	14	516
fragments	216	70	88	2	81		38	2	2	13	14	22	71	132	39	31	2053
modified																	
whole	3			1								1	2		1	4	32
fragments	2	1		1	2		1			2	1		3		6	3	42
Subtotal - flakes	263	87	110	3	117		63	3	4	17	18	33	94	175	56	52	2643
TOOLS																	
unifacial																	
fragments																	1
ovate scrapers																	
discoidal scraper	1																1
backed scraper	3												1				4
scraper																	2
spoke shave	1																1
bifacial																	
roughout							1						1	2		1	8
scraper																	
discoidal scraper																1	1
backed scraper				1												1	11
backed chopper																	2
chopper-scraper																	1
hafted end scrap.				1													2
discoidal biface	1				1												5
ovate biface											1				1		5
graver																	
punch/awl	1														1		4
knife	1																2
adze																	
fragments	2			1	1		2						1			1	24
points																	
quartz crude stem					1												1
shield shaped													1				4
leaf shaped				1													1
Hardaway					1												1
Yadkin			1														2
Morrow Mt. I			1												1		3
Sm. Triangular													1				7
Savannah River	1												1				7
(reshaped)																	1
fragments	11			1	3	1	2			1	1		3	1		4	56
Subtotal - tools	22	2	5		7	1	5			1	1	1	9	5	1	8	157
OTHER																	
debris	282	68	127	2	116		62	8	16	62	66	110	117	177	84	58	2426
cores	6	1					2					1		1		3	33
hammerstones	2									1			2			1	11
Subtotal - other	290	69	127	2	116		64	8	16	63	67	111	119	178	84	62	2470
GRAND TOTAL	575	158	242	5	240	1	132	11	20	81	86	145	222	358	141	122	5270

TABLE 14. GROUND STONE ASSEMBLAGE RECOVERED FROM 9EB219.

	Celt	Nutting Stone	Plug	Steatite Vessel Frag.	Abrader Frag.	Metate Frag.	Net Sinkers	Total
N360/E510								
1						1	1	2
2								
3	1							1
4								
N330/E506								
1								
2		1	1			3		5
3								
4								
F283								
N300/E508								
1								
2					1			1
3								
N300/E550								
1					1			1
2								
2-3								
3								
N350/E476								
1	1			2				3
2					1			1
3								
4								
N320/E478								
1				4	2	1		7
2								
3					1			1
4								
N360/E548								
1								
2								
3				4				4
4					1			1
N280/E593								
1						1		1
2								
3								
Systematic Surface		2			1	1		4
TOTAL	2	3	1	10	8	7	1	32

Not surprisingly, the ceramic assemblage proved to be the more temporally sensitive of the overall assemblage. The lithic assemblage lent itself to general conclusions concerning possible site function and areal utilization.

As noted in the Previous Investigations section, Taylor and Smith (1978) dated the site to the Woodland/Mississippian periods, on the basis of single incidences of simple stamped and complicated stamped sherds and six plain body pieces. Subsequent work by TRC identified the presence of a Late Archaic/Stallings component, in addition to the previously identified Woodland/Mississippian component. The work conducted by NWR confirmed these occupations and also revealed the presence of a previously undiscovered Early Woodland component marked by the presence of Dunlap Fabric Impressed and Deptford-like ceramics. The relationship between the two components is a matter of some interest and will be elaborated below. Both Etowah and Savannah Complicated Stamped types were also identified, confirming a Late Woodland and Early Mississippian occupation.

The analysis of the sherds in terms of their paste/temper composition indicated that the 9EB219 assemblage with regard to that attribute was similar, but not identical to the assemblages from the other three sites. The greater percentage of Category III paste/temper sherds appears to be accounted for predominately in the plainware ceramics and in the Deptford Simple Stamped and Check Stamped sherds from the site; at 9EB208, the Category III percentage was composed solely of plainware sherds (Chapter Four, Table 6). The number of diagnostics, however, at both sites, is still too small to say with assurance that any direct correlation exists between specific named varieties and paste/tempered categories, with of course the exception of the Category I fiber-tempered sherds.

The same problems occurred with the lithic assemblage in terms of allowing for the discrete separation of temporally indicative components. However, the lithic assemblage viewed in toto did allow for statements concerning possible uses and functions at the site.

The lithic assemblage is predominantly comprised of flakes and debris (95.6 percent) and has a low percentage of unifacial and bifacial tools (3.6 percent). The high ratio of flakes to tools reflects the importance of tool manufacturing at the site. The manufacturing is predominantly from quartz (64.3 percent). The use of various stone types may reflect the functional requirements of specific tools. For example, there seems to be a selective distinction between stone types used to manufacture projectile points, with 70.3 percent made from quartz and 18.6 percent from fine-grained granitic stone. These percentages are approximately two times greater than the use of these same stone types to make other bifaces (34.4 percent and 7.4 percent respectively). Chert use at the site also mirrors this trend in that a greater percentage of projectile points than other bifaces was made of that material. The use of fine grained silicates for projectile points may be because these stone types are easier to flake, have more

even edges, and are more easily fractured than other lithic types found in the area.

The presence of hammerstones, cores, roughouts, flakes, and debris of each of these stone types indicates most manufacturing was probably done at the site. This includes the possible manufacture of vessels from soapstone, as both soapstone vessel fragments and debris were recovered at 9EB219.

The wide range of tool types in the assemblage perhaps reflects seasonal task diversity of the occupants' activities. There is a predominance of heavier and larger tools with longer cutting edges (backed scrapers, discoidal and ovate bifaces) in the collection than is present in the collections from the other three sites. Edge wear analysis in future investigations may clarify the types of uses to which these tools were applied, but such studies would probably be most suitable for only the chert items.

Site Interpretations

The combined artifactual data from previous and current work at the site manifest evidence that the terrace area was occupied during the Archaic Stage, the Early Woodland and Mississippian periods. The best defined occupations are the Late Archaic Stallings/Early Woodland component and a later Etowah/Savannah component.

The Early and Middle Archaic occupations are represented in our collections by one Hardaway projectile point (Coe 1964:65-67) and four Morrow Mountain I points (Taylor and Smith 1978:256). All five were recovered in disturbed contexts in the upper excavation levels, and were found in association with artifactual materials from later time periods. Therefore, there is no way to determine the cultural affiliation of the other lithic materials found in the same contexts. The points were recovered primarily in the vicinity of the terrace indicating the probable restriction of the Archaic occupations to that area of the site.

The presence of a "pure" Stallings component at 9EB219 could not be confirmed. The two Stallings ceramics, one Plain and one Punctate, were recovered from level 3 in Units N360/E510 and N300/E550, respectively. In N300/E510, level 3, the only other ceramic recovered was a plain sand-tempered body piece. No diagnostic chipped or groundstone pieces were identified from the unit. In Unit N360/E510, level 3, the Stallings Plain sherd co-occurred with Dunlap Fabric Impressed, Deptford-like Simple Stamped, two of the seven Savannah River points recovered at the site, and a groundstone celt fragment. The occurrence of these various diagnostics are suggestive of Savannah River Formative and Early Woodland occupations at the site.

The co-occurrence of these types in an undisturbed context in Unit N360/E510 would also argue for possible vertical separation of Savannah River Formative and Early Woodland occupations at the site.

The possibility of such vertical separation cannot be substantiated, however, for while both the Stallings ceramics and the majority of Dunlap Fabric Impressed and Deptford Simple Stamped ceramics were recovered from levels 2 and 3, only in Unit N360/E510 was a completely undisturbed A₁ horizon (level 3) identified.

The representative profiles of the site presented earlier in this site discussion make it apparent that disturbance across the site is not uniform in nature. While mixing of temporal periods is definitely present, there is evidence to support relatively intact Savannah River Formative and Early Woodland deposits at the site, probably in the form of pockets of midden or thin lenses at the A₁/Transition interface in the northern and western sections of the site. This pocketing would suggest that the site was the scene of use over the temporal period encompassing the Savannah River Formative and Early Woodland.

At this stage of the testing it is not certain to what degree the same can be said of the later occupations at the site. The Late Woodland-Mississippian period is represented by seven Small Triangular and a single Leaf-Shaped, Narrow and Small point (Wauchope 1966:113). These are probably from an Etowah component which, like the Stallings and Early Woodland components, is dispersed over the site. The occurrence of both a feature and two postmolds in N330/E506 at depths corresponding to the A₁/Transition interface might indicate the presence of such intact occupation levels for the Mississippian periods as well. The artifactual material, however, from both levels 3 and 4 in that unit are too meager in terms of diagnostic ceramics and lithics to definitely date the temporal association, although the crushed vessel is an Etowah Complicated Stamped.

CHAPTER SIX

INTERPRETATIONS

In the preceding chapter, each site was interpreted on an individual basis. Taken as a group, the site data permit us to explore the general research concerns raised in Chapter Two. These concerns focus upon the evidence for temporal variation in settlement preference and community patterning.

Our investigations indicate the Beaverdam Group was occupied during the Archaic, Woodland, and Mississippian periods; however, the most prolific remains suggestive of activity of the greatest duration and intensity are associated with what we have referred to as the Savannah River Formative (see Chapter Two), Early Woodland and Mississippian periods.

Limited lithic and ceramic diagnostics were recovered which indicated activity during the Early and Middle Archaic and the Middle and Late Woodland periods. Because the chronological data are so few for most of the prehistoric occupations, only a brief summation will be presented of the chronological periods that are weakly represented.

Early and Middle Archaic materials were identified by Taylor and Smith (1978) at all four of the Beaverdam Group sites. Each of these sites was also classified as occurring on terrace landforms, in what Taylor and Smith (1978:333) characterized as lowland topographic settings. Subsequent work by TRC (Gardner and Barse 1980) and NWR supplied little additional data to refine the nature of either the Early or Middle Archaic occupations at any of the sites, except to

lend clarification to the composition of the landform. TRC recognized Early or Middle Archaic components at 9EB92 and 9EB219; it should be noted that they conducted no work at 9EB208. NWR identified Early and Middle Archaic at 9EB92 and 9EB219, and Middle Archaic at 9EB208. No Archaic materials were identified at 9EB207.

Although we point out that the assignation of these components is based on projectile points alone, the presence of diagnostics is an indicator of possible mixing in the assemblages, particularly of flakes and debris. For materials found on the surface or in a plowzone context, any given flake could have been detached anytime during the Archaic, Woodland or Mississippian periods. With this type of potential mixing, interpretations drawn from the lithic analysis must be viewed with caution unless the materials are from sealed horizons or features. Although the range and intensity of Early and Middle Archaic activity is impossible to assess, some inferences on general settlement can be made.

The conclusions of the geomorphic studies conducted by both TRC and NWR (see Chapter Five for latter) indicated that the landforms had been stabilized since Early Archaic times, if not before. It would appear then from these data that during Early and Middle Archaic times selection for lowland terrace locations was part of the overall settlement strategy. An examination of site location data from Taylor and Smith's (1978) survey (Table 15), confirms that 20.9 percent of Early Archaic and 23.7 percent of Middle Archaic components recognized by those authors occurred on lowland terraces. Although the survey data indicate utilization of lowland locations during these periods, subsequent excavations confirmed the presence of some of the occupations but supplied little additional data.

Likewise, the representation at the Beaverdam Group of well-defined Middle and Late Woodland occupations is not present. No definite Middle Woodland materials were found. As for the Late Woodland, what types might fit this period, principally a single Woodstock-like complicated stamped sherd from 9EB92, must be considered a transitional hallmark from the Woodland into the Mississippian. These data are insufficient to address questions of subsistence modes or settlement preference for the Middle and Late Woodland periods.

In conclusion, the occupations at the Beaverdam Group dating to the Early and Middle Archaic and the Middle and Late Woodland are not sufficient enough to allow for much comment. More theoretical interpretations can be drawn, however, for the Late Archaic/Early Woodland Savannah River Formative and Mississippian occupations.

Savannah River Formative and Early Woodland

Our investigations confirmed the presence of Stallings cultural remains at 9EB219, which was originally suggested by TRC (Gardner and

TABLE 15. CHRONOLOGICAL PERIOD BY LANDFORM PREFERENCE*

Landform type	Early Archaic	Middle Archaic	Late Archaic	Woodland	Mississippian
Terrace	9/20.9%	24/23.7%	15/28.3%	16/70%	19/54%
Levee	0	0	0	0	1/3%
Bottomland knoll	0	0	0	0	0
River	0	0	0	1/4%	1/3%
Bluff	0	0	1/1.8%	0	0
Island	0	0	1/1.8%	0	1/3%
Active floodplain	0	0	0	0	0
Ridgetop	24/55.8%	49/48.5%	21/39.6%	3/13%	11/31%
Ridgenose	6/13.9%	11/10.8%	7/13.2%	2/9%	1/3%
Ridgeslope	0	8/7.9%	5/9.4%	1/4%	0
Saddle	0	1/.9%	1/1.8%	0	1/3%
Upland knoll	4/9.3%	8/7.9%	2/3.7%	0	0
All Lowland	9/20.9%	24/23.7%	17/32%	17/74%	22/63%
All Upland	34/79%	77/76.2%	36/67.9%	6/26%	13/37%

*Archaic data extrapolated from Appendix A (Taylor and Smith 1978)
Woodland and Mississippian data compiled from Taylor and Smith (1978:333)

Barse 1980) as possibly representing one of the northernmost manifestations of the culture. This site is situated on Beaverdam Creek, a tributary of the upper Savannah River, itself north of the traditional sphere of Stallings settlement (cf. Stoltman 1974). Also, the Stallings remains occur stratigraphically with Early Woodland types represented by Dunlap Fabric Impressed. This was the only occurrence of either ceramic type at the Beaverdam Group, a fact which we feel may have chronological significance. We offer the hypothesis that along the upper Savannah River, the co-occurrence of Stallings and Early Woodland manifestations in the same site setting is representative of a continuation of Late Archaic settlement and subsistence patterns into the Early Woodland. The following discussion focuses on the nature of Late Archaic and Early Woodland subsistence strategies.

The seemingly rich shellfish-harvesting economies of the Late Archaic were marked by the appearance of the first ceramics in North America sometime between 3000 and 2000 B.C. on the St. John's River in Florida and the Savannah River in South Carolina (Sears 1964:261; Bullen and Stoltman 1972; Stoltman 1974). The gradual inland spread of fiber-tempered ceramics appears to have taken place sometime after 2000 B.C. moving up the Savannah River and via the Tennessee River to northern Alabama and middle and western Tennessee. Peterson (1973) reports a date of 1370 ± 160 B.C. for a fiber-tempered ceramic horizon in western Tennessee.

It is generally assumed that to use and manufacture pottery, a group must be fairly sedentary. However, this statement might better be phrased to imply stability rather than sedentism. A group whose resource exploitation cycle is carefully scheduled to provide the optimal cost/benefit ratio can be highly stable without remaining in one location year-round. We suggest the Late Archaic ceramic-using groups achieved such an efficiency in exploitation that followed a seasonal cycle, but permitted semi-sedentary settlement.

The semi-sedentary nature of the Late Archaic shellfish gatherers' ecological adaptation may have had another major consequence. Over the years, a few sites in Kentucky, Illinois, and Arkansas have produced markedly enlarged seeds of such species as goosefoot or lamb's quarter (*Chenopodium* sp.), pigweed (*Amaranthus* sp.), giant ragweed (*Ambrosia trifida* L.), sunflower (*Helianthus annuus* L.), and sumpweed (*Iva* sp.) (Struvever 1971:384). While scholars are by no means in agreement with their interpretation, the enlarged seeds apparently indicate that, during the Late Archaic and Early Woodland periods, these plants were no longer merely gathered. Yarnell (1976:265-266) would account for these botanical changes by the fact that humans had "encouraged, tended, protected, propagated, altered, or extended their range or habitat..."

The relation of plant domestication to the sedentism of Late Archaic peoples has been suggested by Fowler (1971) using the so-called "Dump Heap Theory" of the origins of agriculture proposed by Anderson (1952). According to these researchers, the natural habitats

of Chenopodium, Amaranthus, and other plants listed above are cleared, disturbed, or open areas. Since clearing and disturbance of the biota is precisely what is to be expected around human settlements, these plants grow there in abundance. As Fowler notes:

a dump heap is an ideal open habitat. Kitchen middens built up of refuse from successive occupations are examples par excellence of disturbed soil where the types of plants under consideration can gain a foothold. It is under these conditions that man could have begun his cultivation of plants as a source of food. Sauer (1950) points out that these plants (e.g., amaranths) are nitrogen feeders, and a dump heap is an ideal nitrogen source (Fowler 1971:123-124).

Two necessary preconditions for plant domestication under the "Dump Heap Theory," some degree of sedentism and the extensive use of local plant resources (Fowler 1971: 124-125), are both met in the Late Archaic period in the eastern and especially in the southeastern United States. The implication of this situation suggests that domestication of plants such as maygrass, goosefoot, ragweed, sumpweed, sunflower, and other native species occurred in the southeastern United States earlier than, and therefore independent of, the introduction of cultigens such as maize, beans, squash, and gourds from Mesoamerica (Yarnell 1976, Struever 1971, Cutler and Blake 1973, Struever and Vickery 1973).

Unlike so many hypotheses in archaeology, the idea of an independent origin of agriculture in the eastern United States can be tested. Data are now emerging to suggest that the origin of domestication lies not locally but in Mesoamerica. Recent C-14 dated plant remains from the Carlston-Annis site in Kentucky (Marquardt and Watson 1977) and other sites in south-central Missouri and east Tennessee indicate that at least one Mesoamerican cultigen, squash (Curcubita pepo), was being raised by ceramic Late Archaic period peoples as early as 2300 B.C. (Chomko and Crawford 1978). Of course, as Brown (1977:168) notes, the early squash "was thick shelled, implying a utilization in the manner of gourds and less as food proper." Although Brown is suggesting that squash may have been cultivated for material goods rather than foodstuffs, this date is earlier than any evidence for native plant domestication (Chomko and Crawford 1978:405).

Stoltman (1978:715-716) approaches the problem from another direction. He notes that paleobotanical data from the Koster site shows that between 5000 and 1500 B.C., various kinds of nuts formed the primary plant food at the site. Plant seeds have been recovered from this time period, but according to Asch, Ford, and Asch (1972:25), their occurrence is so limited that "it is not even certain that they were eaten." Stoltman contrasts this to the post-1500 B.C. occupation at Salts Cave in Kentucky where 75 percent of the total diet seem

to have been seeds. From this, he offers the hypothesis that the years after about 1500 B.C. witnessed

a shift in dietary emphasis among Archaic-stage peoples in parts of the East, with seeds generally coming to rival and then surpass nuts as the pre-dominant plant food, and that this trend culminated in the domestication of a number of native weedy plant species that proved to be prolific seed producers (Stoltman 1978:716).

Present data suggest that Mesoamerican cultigens are present in eastern North America at least by 2300 B.C. and that their introduction preceded an apparent shift in dietary emphasis from nuts to seeds. Sometime after about 1000 B.C., sunflower, sumpweed, goose-foot, maygrass, and perhaps a number of other seed-producing plants show evidence of being harvested, tended, and transported beyond their natural ranges as part of their incorporation into the Late Archaic period subsistence systems. Finally, as Chomko and Crawford (1978:407) note, "by 500 B.C. the sequence at Salts Cave documents that native and tropical cultigens were (both) important subsistence items" in the economy of terminal Archaic period peoples.

The apparent presence of tropical cultigens in eastern North America by the middle of the Late Archaic period means that we can no longer support the hypothesis that the shift from nuts to seeds and the rise of the Eastern Agricultural Complex after 1500 to 1000 B.C. occurred independent of Mesoamerican contact. Although, as Stoltman (1978:716) notes, "the causal forces that set (these trends) in motion remain to be isolated," scholars are now giving greater credence to the view that food production in eastern North America was

not an independent development but was a regional adaptation of the concept of horticulture that originated in Mesoamerica (Chomko and Crawford 1978:405).

Whatever the source or inspiration of the appearance of food production in eastern North America, its rise is roughly correlated with at least two significant cultural and ecological events:

- 1) The end of the period of world climatic amelioration and the return of a new cycle of "neoglaciation" between about 1350 B.C. and 450 B.C. (Denton and Karlen 1973; Denton and Porter 1967).
- 2) The disappearance of the large riverine shellfish "harvesting economies" in the Southeast and Midwest between 2000 and 1000 B.C. (Winters 1974:xii).

Perhaps these events are related and partially explain the relatively rapid emergence, acceptance, and spread of both native and

Mesoamerican cultigens near the end of the Late Archaic period. It seems likely that the somewhat colder mean annual temperatures of the "neoglaciation" combined with the presumed reduction in world sea levels may have lowered the river gradients in North America, reducing the quantities of shellfish available there. This might have impacted the economies of the Shellmound Archaic peoples and forced them to alter their systems.

In part, food stress might have been accompanied by increased violence and warfare. For example, Late Archaic period sites like Indian Knoll in Kentucky and the Riverton sites in Indiana commonly contain numerous burials with projectile points embedded in the remains. Interestingly, the projectile points embedded in the Indian Knoll burials are generally of nonlocal raw material, while those in the Riverton burials are of local cherts. Winters (1974:xi) interprets the former as evidence of violence from external sources and the latter as evidence of local, intrasocietal conflict.

Although it is possible that the kind of "food-crises in pre-history" to which Cohen (1977) assigns an important role in human affairs may have influenced the end of the great "harvesting economies" and their replacement by "mixed" hunting and gathering and horticultural ones, there is no data on Stallings sites to indicate this was the case. Future data on the culture's decline may shed light on the degree to which stress and crises impacted the harvesting communities; however, we feel that at least by the end of the Late Archaic the emphasis was moving away from shellfish exploitation.

This may be evidenced from Taylor and Smith's (1978) data on settlement, where differences are seen between Late Archaic site locations and those of the preceding Archaic periods. Early and Middle Archaic sites are found on lowland terraces, but a greater incidence occurs in upland settings (Table 15). During the Late Archaic, slight increases in the selection for lowland settings is seen and the frequency of sites in upland locations is reduced. The presence of Stallings sites in the RBRMRA may, then, represent the terminal expression of that culture and the adaptation from shellfish harvesting to a more diffuse hunting-gathering-horticultural economy typical of the Early Woodland (Anderson et al. 1979; Taylor and Smith 1978; DePratter 1975; Garrow 1975).

It appears, therefore, that the occurrence of Stallings and Early Woodland materials in the same site setting represents evidence for the transition from the ceramic Late Archaic harvesting economies to the Early Woodland broader spectrum economies. Further, we feel the occurrence in the same environmental setting suggests that transition was without major cultural shifts. If Stallings culture was characterized by the impressive shell mounds of the lower Savannah River alone, their abandonment might indicate dramatic cultural changes, thus defeating the gradual transition argument. As we have noted, however, there is increasing support for those Coastal Plain sites to have been but one component of a seasonally scheduled settlement

system which also included inland, non-shell midden sites (cf. Campbell et al. 1981).

Disruption of the shellfish economy by climatic events undoubtedly disrupted the overall Stallings subsistence cycle, but we are suggesting that these groups were preadapted to accept and deal with this change by expanding the economic base represented by hunting and non-shellfish gathering activities that probably typified the inland Coastal Plain sites. In the upper Savannah River region, therefore, the manifestations of Stallings might be taken to reflect this expansion of the diffuse economy. Gradually, then, there appears to be a change in ceramic manufacture from the poor-firing and fiber-tempering of Stallings types to the better firing and use of sand and/or grit temper in the Woodland types. Eventually, these changes in the material inventory, coupled with changes in the settlement and economic systems, resulted in the full expression of Woodland culture, without residual Stallings traits.

Mississippian Occupation: Implications for Regional Settlement

The strongest manifestation of prehistoric occupation at the Beaverdam Group was clearly that dating to the Mississippian period, specifically Savannah II to Early Lamar. Components of this period were present at all four sites, although the data suggest varying degrees of intensity with regard to utilization. The association of diagnostic ceramics with several postmolds and features, particularly at 9EB92 and 9EB208, suggests that the structural remains found at those sites date to the Mississippian occupation.

Although the Mississippian components were unexpectedly restricted even after Phase I excavations, they certainly represented the most well-defined occupations at the Beaverdam Group. In terms of artifactual remains, the total number of Mississippian ceramics was 71, of which 7.0 percent were from 9EB92, 11.2 percent from 9EB207, 16.9 percent from 9EB208, and 64.7 percent from 9EB219. In general, however, the ceramic collection was heavily characterized by plain wares and the artifactual material as a whole produced no evidence of ceremonialism or indications of high status residents at these sites. The lithic data available from analysis of the least disturbed components indicates a similar absence of status items. Reliance upon local raw materials, predominantly quartz, was recognized in the collection and there were no indications that the lithics marked activities at the Mississippian components distinct from general maintenance and/or manufacture.

The only substantive data on subsistence was derived from 9EB92, where three maize kernels were recovered from postmolds which also yielded Mississippian materials. Other than these remains, the botanical study revealed only the presence of minor quantities of seed fragments and more appreciable quantities of wood charcoal.

Although the sites at which Mississippian remains occur encompass large areas, the components of this period are relatively small. The question arises then as to how these occupations relate to contemporaneous sites in the RBR area. It is our feeling that they are best interpreted in light of recent discussions of Mississippian settlement models in which attempts have been made, either in a general or specific sense, to relegate different sites into a class hierarchy.

In a general discussion of the Mississippian period, Hudson (1976:85) characterizes four types of sites. At the apex of the hierarchical triangle are ceremonial centers marked by substantial support populations. Citing Cahokia as an example, Hudson notes that such sites are the locus of ceremonial, sociopolitical, religious, and economic activities. Second in the hierarchy are ceremonial centers with only a very small residential population (e.g., Spiro or Town Creek). Within a few miles of the latter site type are two distinct, but probably related habitation types: small, fortified villages and small, unfortified homesteads. It is the homestead site type which was characteristically located close to arable land. This pattern was documented into historic times in the Southeast, where observers noted that only some of the members of chiefdoms lived in a central town; however, homesteads or small hamlets were found scattered up and down principal drainages and their major tributaries (Hudson 1976:211).

Pearson (1978:172-177), presenting a model of site class for the Mississippian Irene Phase occupations on Ossabaw Island, Georgia, also notes four classes of sites. Class I sites are comprised of the largest Irene Phase sites on the Island, and represent 57 percent of the total area of the 47 known Irene Phase sites. Both Class I sites have significant pre-Irene occupations and more than one Irene Phase burial mound. Their location on large tidal creeks, coupled with the cultural and environmental features, suggests that they were occupied on a permanent year-round basis and served as major centers of population and many, if not all of the social, political and religious activities.

Pearson identified six Class II sites. There appear, however, to be some very distinct differences between them which may ultimately mean they should be separated into existing or new classes. Three of the sites in this class have evidence of pre-Irene Phase activity while three do not. Further, one of the sites contains a burial mound. Pearson suggests that the Class II sites without previous occupations may represent either population expansion during the Irene phase or seasonal dispersal of the total Irene Phase population over the island. As support for the dispersal theory, he cites limited evidence that the historic Gule of the Georgia coast reflected a pattern of seasonal dispersion or shifting in order to take advantage of particular resources.

Class III sites (N=12) are those which are best described as hamlets, either occupied permanently or on a semi-permanent basis.

Although Pearson notes these sites were probably self-sufficient, he suggests that they were also probably dependent upon and related to large sites in the sociopolitical sphere. Again, as with some of the Class II sites, five of the Class III sites have burial mounds. Pearson regards the sites with mounds as possible indicators of permanent settlements developed because of Mississippian expansion. Those without mounds, he again interprets as representing seasonal dispersement of the population.

The final class, Class IV (N=22), represents loci of a limited range of activities and short-term occupations. Variation is noted in this class with regard to function as typified by artifacts as well as locational preference.

In viewing these two models of Mississippian settlement in light of the data from the Beaverdam Group, Hudson's homestead site type and Pearson's Class III site without burial mounds appear to be most similar to our components. The Beaverdam components are all limited in size and without evidence of fortification or cultural features such as mounds. Although they may represent varying degrees of intensity in activity and each reveals evidence of some previous occupation, there is no reason to believe that these sites were occupied on a permanent basis over a long period of time by any substantial number of individuals.

The fact that these Mississippian habitation sites are located in proximity to the contemporaneous Beaverdam Creek Mound and Village (9EB85) is of special interest. Beaverdam Creek Mound dates to the Savannah II period and is located approximately two kilometers from the easternmost site of the Beaverdam Group, 9EB219. In light of pertinent models and historic documentation, it is likely that the Beaverdam Group components were so located not only for environmental factors, but also to interact in the sociopolitical sphere governed, at least to some degree, by the Beaverdam Creek Mound center. Their internal site structure, reflecting a series of homesteads, is perhaps best interpreted in terms of recent discussions on settlement as it relates to subsistence during the Mississippian period.

Whatever the sociocultural level of a Mississippian system, it is believed that they were supported by an efficient and highly productive economy. However, the precise nature of that economy has yet to be fully understood. Traditionally, it has been assumed that the period witnessed an expansion in the reliance on the key Mesoamerican cultigens of beans, squash, gourds, amaranths, pumpkins, and new varieties of corn, as well as such native plants as sunflowers and perhaps sumpweed. While there is no question that midden material recovered from Mississippian sites contains abundant quantities of the remains of these plants, Muller (1978:307-308) and B.D. Smith (1978:483) stress that wild plant products, particularly nuts such as acorn, walnut and hickory, fruits including persimmons, cherries, plums, and hackberries, and a variety of seeds all remained exceedingly important elements in the southeastern aboriginal diet

well into historic times. In addition, game continued to be a critical element in the Mississippian diet. In an examination of the faunal remains from seven Middle Mississippian sites, B.D. Smith (1975:9) found that over 100 different species of wild vertebrates appear to have been hunted.

As B.D. Smith (1975:121) notes, however, "13 species/species groups accounted for 92 to 99 percent of the total meat yield represented at each of the seven sites being considered." These 13 species or species groups consisted of: fish and turtles, migratory waterfowl, rabbit, bear, squirrel, beaver, deer, raccoon, wild turkey, and opossum. Based both on the relative abundance of their remains in Mississippian middens and the quantities of meat that each individual represents, B.D. Smith (1975:127) concludes that the most important wild animal species in the Mississippian diet were whitetail deer, raccoon, wild turkey, and opossum in that order.

It would seem logical then to classify the Mississippian (and later, the Historic) subsistence systems as "mixed economies," in which wild game, particularly deer, were combined with gathered plant products and cultivated species of both Mesoamerican and native origins. However, the focus of attention in Mississippian times appears to have been on agriculture. The agricultural basis of Mississippian life can clearly be observed in the extensive "ridged-field" systems noted by Fowler (1969), Kelly (1938), and others, in association with Mississippian sites. It is further reflected in the observation that late prehistoric Mississippian sites

in Illinois and Indiana, for example, are in riverine extensions of the Southeastern environments, as shown by their location just inside the southern limits of the area where cypress trees grow (Muller 1978:309).

Since important wild plant resources, such as hickory nuts, and animals, such as deer, are abundant outside the areal range of the cypress tree, it seems likely that the major impediment to the spread of the Mississippian system in the Midwest was the limited adaptability of its cultivated plants. Further, it is interesting to note that, of the 13 species or species groups which B.D. Smith (1975) considers to have provided the bulk of the animal protein in Mississippian diets, eight most likely were hunted between about October until early April. The concentration on species available during the winter suggests that Mississippian peoples had chosen to concentrate on those animal species whose availability conflicted least with their schedule of planting, cultivating, and harvesting. Conversely, they seem to have largely ignored the species whose abundance coincided and therefore conflicted with their schedule of agricultural activities. Taken together, these observations suggest that the minimum conditions for the growth of Mississippian systems to their fully-developed form was a successful and productive corn agriculture. This may not have been a sufficient condition, but it appears certainly to have been a necessary one.

As a consequence of the importance both of agricultural pursuits and hunting and gathering of the limited assemblage of 13 species or species groups, B.D. Smith (1978:480) suggests that the Mississippian cultural system became closely adapted to virtually a single environmental setting: the "meander-belt zone" habitat of the Lower Mississippi River and its major tributaries. B.D. Smith (1978:481) characterizes this zone as composed of "linear bands of circumscribed agricultural land and concentrated biotic resources" and states that the specific location of any particular Mississippian settlement within the zone was a function of two major factors:

- 1) The availability of well-drained, easily tilled,...
natural levee soils suitable for horticulture garden plots.
- 2) Easy access to the rich protein resources of fish and waterfowl in channel-remnant oxbow lakes (B.D. Smith 1978: 488).

A similar situation may be postulated for the Upper Savannah River region, particularly the RBR project area. Taylor and Smith (1978:333) indicated that of all the Mississippian components they recorded, 63 percent were situated in lowland settings, while only 37 percent were located in the uplands. These percentages may likely reflect selection for a location near arable land as well as providing easy access to other riverine resources. As in B.D. Smith's (1978) argument, such a location affords the ability to sustain an economy based on both horticulture and gathering and hunting.

The presence, however, of both upland and lowland Mississippian sites probably implies differences between site types. These differences are probably also reflected between lowland components. Taking this argument further, it is our opinion that the sites in the RBR project area dating to this period may be elements of a sociopolitical settlement system operating around and related to activities at the Beaverdam Creek Mound. The small, very limited Mississippian components in the Beaverdam Group should best be viewed as dispersed homesteads, occupied by one or only a few families. Although the absence of midden deposits at some of these sites, such as 9EB92, may be the result of soil erosion and deflation, remains at none of the sites in the Beaverdam Group were comparable to those, for example, at Rucker's Bottom, 9EB91, a palisaded village approximately eight kilometers to the north (David G. Anderson, personal communication 1980).

The evidence to date for the RBR project in general seems to point to a three-tiered hierarchy, of which the Beaverdam Group occupied the lowest rung. At the apex are the Beaverdam Creek Mound and Village and the Tate Mound and Village, 9EB86, which are probably the cultural and political centers, although the resident populations at these sites do not appear to approximate sites such as Moundville, Town Creek, or Kolomoki. The second rung seems to consist of fortified and

palisaded village sites with substantial cultural deposits, indicating multiple structures and intense Mississippian activity. Finally, there are the Beaverdam sites which can only be interpreted at present as small, dispersed homesteads. Conspicuously absent from the hierarchy are specialized or very limited activity sites dating to this period. The apparent absence of this class of site may be related to the fact that only bottomland locations were subjected to Phase I data recovery and that upland excavations may yet yield evidence of this site type; or, some of the smaller sites in the Beaverdam Group, such as 9EB219, may represent limited activity.

The striking significance of the overall RBR project area is the apparent representation of several different components of the Mississippian settlement system. In order to fully explicate the system and delineate better the economic, political, and social forces directing Mississippian society, comparable investigation of each component of the system is crucial.

CHAPTER SEVEN

CONCLUDING REMARKS

The principal contribution of the Beaverdam Group investigations has been in adding data on several chronological periods. Although in the preceding chapter we have put forth several hypotheses on settlement, they represent only one small portion of the overall picture.

Most important are our data on the Stallings/Early Woodland and Mississippian components. As the data base is expanded by the completion of investigations on like components, we will move forward in understanding the place of the Beaverdam Group sites in the settlement system of these periods.

At present, the relationship of the northern Stallings sites to the cultural core area manifestation requires further clarification. Also, the relationship of these groups and early Woodland occupation should be explored.

For the Mississippian components, we need a more comprehensive picture of settlement dynamics. Sites such as Beaverdam Creek Mound and Village, Rucker's Bottom and the Beaverdam Group do not reflect the same range of activities, nor is it presumed that their inhabitants would have the same range of statuses. How each type of site relates to the others is a crucial question to be examined in this region.

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